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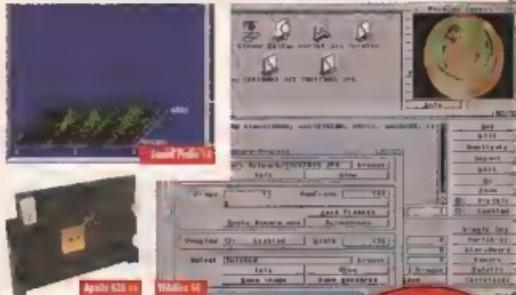
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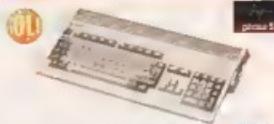


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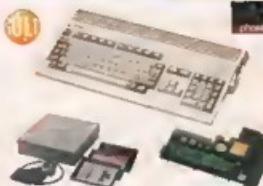


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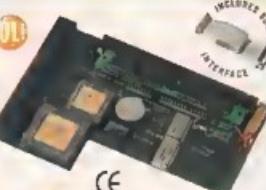
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News

Computer '97 Special

The Computer '97 show held in Cologne over the 14-16th of November was being touted as the most important event for the Amiga in ages, and the promises weren't empty.

At this interesting and challenging time in the history of the Amiga people visited the show from around the world to see what shape the future of the Amiga would take. Computer '97 is an all formats computer show, but there was no doubt that the predominant platform was the Amiga.

Tens of thousands of visitors crammed into the large halls in the Ko Messe, the German Exhibition Grounds. The show was a buyer's dreams, with countless software and hardware bargains, including 40+ accelerator cards for under a hundred pounds and (small) hard drives for as little as four. The real pull, however, were the new products displayed. These included some of the most significant developments the Amiga has seen in years.

There were a series of seminars held throughout the three days of the show enlightening members of the public on a number of interesting topics such as Haage & Partner's Java Virtual Machine, Menap, and Dr Greg Perry's Directory Opus. The talk everyone wanted in on was the Developer's Conference, held on the Saturday night. Unlike previous developer's conferences, this one was used as an opportunity to let the industry take a look at the people who now run the company and see

what they are doing.

The Boing is back

The Stand attracting most of the attention was, unsurprisingly, the Amiga stand. A large hospitality room situated right in the centre of the hall was surrounded by stalls on which a number of companies had been invited to show their wares. At the front desk various members of

the Amiga Inc. team stood around in their red and white boing ball T shirts, assuring everyone that the Amiga was back for good and handing out stickers. The new server hardware engineer Joe Torre spent a lot of time demonstrating his Amazing Floating Boing ball trick to anyone who cared to watch.

Perhaps the development garnering the most attention on the Amiga

stand was the new Amiga compatible, the A5000. This computer is being developed by DCE in Germany, in co-operation with the UK's Power Computing. It consists of a mother board which is 100% Amiga compatible, and is baby AT size, designed to fit into a standard PC size tower case. The model on display ran a 68030 at 50MHz, but the final production model may have an uprated





processor. There is also a 68060 version expected to come shortly. The beauty of the design is that it will be possible to sell cheap OEM Amigas built into towers with the specification the customer wants, standard PC parts being added as required.

The three Amigas

Just to prove that when you have to wait for ages three always come along, Index Information were also on the stand, showing two entirely new Amiga compatible computers of their own. The first was the impressive

Access, the Amiga on a 5.25" card which is sold as a multimedia display solution for point of sale and information kiosk implementations, the second was the BoXeR another baby AT card designed an OEM Amiga Clone board. The first run board, straight from the factory arrived in Cologne on the Saturday and received more attention than is entirely healthy for a piece of printed circuit board.

Designed as an A4000 compatible high end solution, it is hoped that it will be priced between the A1200 and the A4000, but will provide excellent

Tomorrow's Amiga

The Power Computing/ DCE A5000 is an Amiga that looks like a PC. Designed to be a compromise between A4000 and A1200, it features a scan doubler for ints with cheap PC monitors, optional modulator, 4 Zorro 2 slots, dual IDE interfaces, a bus slot for accelerators and an MPEG Module, a spiffing ATX case and a 68030 processor, with a 68060 version to come. Left, Tom Lenke of Power Computing shows it off to hordes of impressed onlookers.



expansion options and performance significantly better than an A4000

Amiga PCI!

Micronik occupied another corner of their stand with a selection of their new tower systems. Amongst the towers on display was one called the A1500 PCI

In the past Micronik have shipped Zorro boards with a couple of PCI slots which allow them rather expensive PC motherboard to be connected in the same case. Some people assumed that this was what Micronik meant, because this particular exhibit did not seem to get the attention it deserved.

A look into the innards of this innocuous tower revealed the truth, the display on the screen was being generated via an off the shelf industry standard S3 PCI graphics card of the kind PC vendors sell for around £30. Micronik say that this model should be ready to ship in a few months, the price to the end user being around £1750DM or £699.

Micronik told us that they will provide support for anyone wanting to provide driver software for any card. If someone were to write CybergraphX / CyberGL for Riva 128, Voodoo 3dfx or Matrox Millennium based cards, these state of the art graphics cards could be used with an Amiga.

Similarly we could hope to see AHI drivers for the legendary Soundblaster sound cards not to mention any number of cheap internal modems, communications

cards, interface cards and the like. Other developments from Micronik include a scandoubler designed to allow users to connect a standard PC monitor to their towers, which is expected to cost in the region of 150DM/ £80.

Elsewhere on the stand were HQ, wowing people with their Siamese Retang system, with fast Amiga screens displayed in a window on a Windows 95 screen. Showing the ideal solution for Siamese systems were Eyetech, who's EZ tower is designed to take a PC motherboard and an Amiga motherboard in the same case.

A single slot Zorro with a graphics card was used. To solve the problem of the missing video connector which the A4000 uses to pass video data to a graphics card so that it can pass native video signals to a monitor as well as its own display, Eyetech had an automatic monitor switcher for owners of multisync monitors.

Hot software

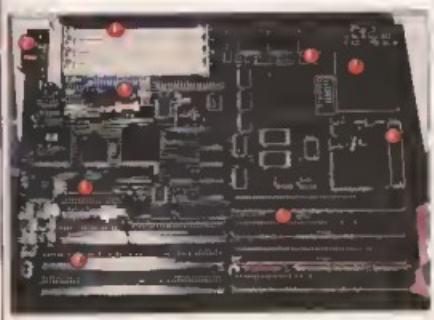
The range of software on show was impressive, too. Haage & Partner had Art Effect 2.5 running in all its 24 bit splendour with a pressure sensitive graphics pad and were showing off the impressive looking Torpedo 3D.

Holger Kruse was showing off the new features of Miami 3.0. Scala were there with their market leading multimedia authoring software, and software packages such as Netconnect could also be seen strutting their stuff.

Tomorrow's Amiga

Here's a look at the BoXeR from Index Information and Blittersoft. This cunning motherboard carries a wealth of features including -

1. 4 SIMM slots capable of accepting up to 2Gb of RAM
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7. CPU slot for any 68040 or 68060 chip.
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▲ *Rage & Fortune's* new 3D rendering package: the very six looking Towards 3D.

Light My Fire

Second only to the Amiga stand in

the interest it attracted was the phase 5 stand next door. A large booth plastered with 'Light My Fire' posters advertising the PowerUp PowerPC cards boasted a sizeable video screen showing regular presentations of the PowerUp cards and a number of PowerPC equipped Amigas showing off what PowerPC could do. Several new applications running in PowerPC were being shown off including Wildfire and Elastic Dreams PPC, a realtime morphing package similar to the famous PowerGob for the PC and Mac.

The A1200 PowerUp card was on

show, although some finalising has still to be done. Fitted with two SIMM slots, SCSI 2, a 6030 and a 88090 processor it's quite a crowded board, but phase 5 nevertheless found space on it to fit a feature connector on it for an A1200 version of the CybervisionPPC graphics card.

Although the graphics card itself was not on show some idea of what could be expected could be seen on a Macintosh running a game on a PCI version of the card. The output was nothing short of superb, a fast, high resolution 3D display that updated very smoothly and quickly while

rasterising complex textures and gouraud shading the polygons in real time. This offers important benefits to 3D rendering, as it will allow real time rendered preview windows in rendering software, one of the new Lightwave features that Newtek has so far been unable to implement in on Amiga version. Equally exciting is the potential for 3D gaming that the board provides.

PowerUP A1200

Although the A1200 PPC card will initially be shipping with a 88090, phase 5 are looking at several possi-

Dev Con

Amiga Inc has, with the ICOA (Independent Council of Open Amiga), been running a series of developers conferences. They have been held on several occasions at Amiga shows, mostly in America, and have been occasions for developers to get together and discuss what was required for the future of the Amiga. AI have been dipping into this resource to find out what the guys who work with the computer every day think, and to help them plan their strategies for the future.

This one was always going to be a little different. Prior to the show, the rumour had been circulating that there was going to be a big announcement, widely presumed to be a commitment to a particular CPU for the future. Hundreds of people from the Amiga industry flooded into the large Seminar rooms to hear what was to be announced.

Petro Tyschtschenko opened with a run down of the licensing arrangements they had made, and mentioned that he hoped a deal with NEC, who make the Chinese WonderTV Amiga system, would be struck soon. He talked about new hardware coming from Index, DCE and Quickpack, as well as license deals with Intrinsic, ELBOW of Poland and ProSupport of South Africa.

Schindler's list - bad joke

Next on the stage was Jeff Schindler, the President of Amiga Inc., in South Dakota. He started by thanking Petro Tyschtschenko for



all his work, which raised a huge cheer. A lot of people were dubious about Petro T, after the Escom collapse, but his hard work during the legal proceedings and in getting Amiga International back on its feet since is clear to all, and have been a large part responsible for the Amiga still being here today.

Jeff Schindler went on to introduce himself, an enthusiast whose first machine was a Commodore Vic20. "I started programming right away, and in about 4 hours..." he said, "I ran out of memory."

He hoped for big announcements never came, but telling statements were made about the future course of the Amiga. It was stated that the platform would be "...at or above" the industry standard in technology, and that the main job was to bring together all the best third party developments while defining a clear set of open standards. The idea is that products with the Boing Ball mark will be fit the standard, that you can be sure that any Boing Ball marked products will be compatible, whatever makes them.

Nothing definite about future hardware choices were made, but the results of their surveys up to date were shown, and these give a strong indicator of what is likely. Support for the PowerPC as CPU of choice was unambiguous, but even more so was the idea that the Amiga OS should in future exist on more than one CPU. Strong emphasis was also put on extension of the Amiga's graphics, communication and multimedia capabilities

Development roadmap

Jeff Schindler went on to talk about their plans for the immediate future, including a 3 year roadmap of development. The first job is to recruit a team, which will be done by searching for the top talent world wide.

Already a number of the big names of the Amiga's history have pledged their support as advisers, including Andy Finkel, R.J. Mical, Dale Luck and Carl Sassenrath. Following that will come OS upgrades and new releases, along with leveraging of AI's and Gateway's clout when dealing with other companies.

They have an approved budget until the year 2000 which will allow them to negotiate seriously with large firms for Amiga support, and, to help soften the concern many have about the future of previous owners to market the machines. AI told us that their budget includes millions of dollars for advertising over the next three years.

Hitting investigation into Internet support, GUI systems, bug fixes, driver support and so on will lead into OS support, initially with a release of a software only upgrade, OS3.5, but with more radical improvements to follow. The importance of upgrading the chipset was stressed, as was getting a new OS with the upgrades from AGA. All this, we were told, would lead to a major new release by the end of 1998. Petro Tyschtschenko summed it up best when he told the audience "I hope you will be here next year to see our new hardware."



▲ Amiga Inc's Jim Terre shows off his chess battles collection under Darrick Loh's steady gaze



4. PowerUP for the masses - phase 5 showed us their A1240 PowerPC card, and here it is!

bit sources of very cheap 68040s and a 68030 version of the card will be released in a few months.

Speaking to us about the future of PowerUp, phase 5 talked about the importance of the multiprocessor capabilities of the PowerUp system. The current range of cards multiprocess between the 680x0 and PPC603e/604 chip, but in the future expect to see cards with several PPC chips added.

Adding a card with multiple 604 processors to an A4000 would turn it into a rendering engine of awe some power, at a price similar specification machines would find it hard to match. With the news that Newtron have taken a real interest in these developments and have announced they will continue to support the Amiga, it looks like there is at least one niche the Amiga is assured a bright future in.

Of course the PowerUp project is only the first step in Phase 5's plans. Although nothing was on show, Phase 5 were reminding everyone of their own Amiga based wonder computer, the ABox. Based around an advanced multimedia processor named after the national drink of Brazil, the Caipirinha, the ABox is intended to be the next generation

of multimedia computing and to prove it phased had a bar hidden inside their stand where they prepared Caipirinha cocktails, and very nice they are too.

Tower fever

The big hardware of the moment judging by what was on display is the tower conversion. Micronik had their own stand as well as their presence on the Amiga stand, where they did a brisk business with their tower kits, built systems and big range of tower accessories. RBM showed off their Towerhawk towers, as well as their Zorro boards and accessories, many of which go to make up the Eytach EZ tower. Eagle Computers GMBH had a wide range of tower cases on display, including some of their own A4000s, while Apollo hosted the elbox tower conversion from Polish company ELBox computer. The elbox looks very nice and seemed to contain a lot of clever solutions and we hope to look at one soon.

There was little new to be seen on the 680x0 series accelerator front, with the attention the PowerPC is currently garnering making it hard for people to produce anything with the older technology likely to attract too much attention.

The only obvious development on the front is the price. Although the basic cost of the chips acts as a drag factor on price reductions, the lower end technology has been plummeting in price of late and has been going for silly prices.

One stand was selling low end 68040 cards for under £100, and as rumours abounded at the show of suppliers with large stacks of old stock being sold absurdly cheaply, we may well see that kind of price

becoming standard soon.

Other hardware developments were thin on the ground. Notable developments were from individual consumers, whose Mark2 Catwesze controller has developed the impressive ability to read old style Veneble speed Mac disks on a non Mac floppy drive, and Voltage Tronic, who were showing off some of their long promised add on cards for the Picasso IV. The Pablo and Phlome video cards were joined by the controversial 16 bit sound card.

More hot software

The most talked about software package making its debut at the Cologne show was Amiga Forever, from Cloanto. This is actually a piece of software for the PC, not the Amiga. It consists of an Amiga emulator, a licensed OS3.1 ROM and networking software which allows you to treat the emulated system as a separate, networked solution. The demands of simulating the Amiga's custom chips is a huge drag on the PC, limited the package to C64 emulation, not AGA. The solution lies in an implementation of Picasso96 software which treats the PC's own display as a Picasso96 screen mode, giving quite an acceptable virtual Amiga.

Hæge & Partner were there with a large stand showing off their own developments as well as various packages they have distributorship of. Notable packages on show were Tomato3D, an ILM 3D rendering package which looked extremely good, reminiscent of an attempt mix the best parts of Imagine and Lightwave, and Art Effect: the Photoshop-like 24bit graphics package which has reached version 2.5.

Hæge & Partner were also busy promoting version 3.0 of their excellent StormC compiler, WarpOS which they claim allows significant performance enhancements for PowerPC coding and X-DOS and FontMachine from ILM's own house Class X developments.

InseeSoft had the latest versions of TurboPrint and Picture Manager Pro, versions 6 and 5 respectively. Currently German only, but expect English versions very soon.

TurboPrint has spinned text handling features for the Graphics Publisher and a photo correction system, while PMPro has showing a whole host of new features. This show will be looked back on as a landmark for the Amiga. The business, and the amount of selling done, will have no doubt been a great encouragement to many deal-

Tomorrow's Amiga

Take a peek into the innards of this Micronik A1500 and you will see the future. Those little white sockets are PCI slots and the card inside is a standard PCI graphics card, has been used to output the Amiga's display. This machine has a PowerPC CPU and PCI slots - what more do you need?



ers. A few warants, on the other hand, voiced concern that there was not enough happening. Certainly the rumoured am much hoped for Big Announcement didn't happen, but one thing Amiga International / Inc made clear is that they are serious.

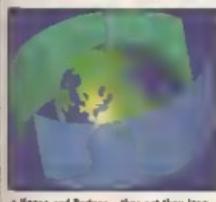
It was a show in which a lot of impressive and important developments were there to see and touch, but the full ramifications of the show have yet to be seen. A lot went on behind closed doors and in hospitality suites, and a lot of hints were dropped. One thing this show made very clear is that if the Amiga is dead, it's the liveliest corpse we're likely to see ■

Andrew Korn

Tomorrow's Amiga

phase 5 were showing off the famous Caipirinha, but unfortunately only in the form of the cocktail, not the chip behind the ABox.

1. Several ice cubes, crushed
2. 3 limes, cubed and crushed to release the juice.
3. Pings, a Brazilian rum
4. Brown sugar.
5. Straw Use this to stir first!



5. Hæge & Partner - they got their logo in the mug 'cos they brought so much.



SANDBERGS

Commodore 64
Software, the **Ultimate Amiga**
CDROM games!

FOUNDATION

The Ultimate Amiga Strategy Wargame!

Due for release in November 1997, Foundation will set new standards for the Real-Time strategy wargame. Featuring many unique features not seen in any game for any platform.

Combining the very best elements of The Settlers 2, Warcraft 2, Command and Conquer, Megalomania along with some totally original ideas and features, Foundation will set new standards for strategy games on all computers.

Brief Feature List:

- ECS, AGA and CyberGFX fully supported.
- 3 player versus 1, 2 or 3 computer controlled players.
- over 500 frames rendered intro.
- Full control over every friendly unit.
- Random level generator for infinite levels!
- Custom made 24-bit quality mission/menu screens.
- Advanced enemy Artificial intelligence.
- Realistic rendered objects such as trees, rocks etc.

If you would like to be one of the very first owners of this massive new Amiga game, kindly fill in the pre-order form below (NOTE: No money will be debited until your order is sent!). This will ensure that your order is despatched on the very day of release!

Release Date: January 1998. • **£29.95 inc p&p.** • <http://www.sandbergs.com/order.html>

SYSTEM REQUIREMENTS: Any Amiga - 2 Meg RAM minimum Double-speed CDROM, AGA and Graphics card fully supported and enhanced.



ON ESCAPEE

Due for release October 1997, onEscapee will set new standards for Action/Adventure games!

A variety of crazy bosses, lots of classic games like Prince of Persia, Another World and Flashback along with many other original ideas and features, onEscapee will set new standards for action/adventure games games on all computers (PC and Amiga versions under development).

Brief Features:

- AGA required. CyberGFX support planned.
- 5 minute long atmospheric 3meg intro.
- 100% multi-leveling system friendly.
- Incredible, atmospheric digital music score!
- Cave, City, Underwater and space levels + more!
- Control choice of Keyboard, joystick or keypad.
- A great variety of different enemies - with intelligence.
- 4 years in development by a large team!

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Release Date: November 1998. • **£29.95 inc p&p.** • <http://www.sandbergs.com/order.html>

SYSTEM REQUIREMENTS: Any Amiga - 4 Meg RAM minimum. Double-speed CDROM or better. Graphics card support planned for the future.

- 100% pure assembly language
- Thousands of hand-drawn animation frames!
- Can be used on Double-scanned screens.
- Complex animations are custom-rendered!
- Logical puzzles
- Full use of AGA chipset - using 256 colours.
- Ripping water, sweeping light beams etc.
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Stateside News

By Jason Compton, Editor in Chief of Amiga Report Magazine

Ohio Fallout

November was ushered in with the latest installment of the Midwest Amiga Expo (MAE), held by Columbus Ohio user group Amicon.

Quite a lot of activity and life packed into a show bigger than its predecessor twelve months ago. Although Newtek did not appear as they were once expected to (more about them later), there was plenty of activity to keep the visitors busy.

Perhaps because of the drought in Amiga shows over the past several months in North America, the developers who came were pushing to be noticed. Nova Design continued their push of the new Aladdin 4D and ImageFX, although at the time there was no discussion of the impending 3.0 update for the latter. If you were looking for Internet connectivity, representatives for AEMail as well as for the



new Finale Development net utilities were on hand, and Gamssoft held a talk session to tell you how to put it all to work. Asimware showed off their latest version of MasterISO which by all appearances should make creating and copying CD-ROMs easier than ever.

Ohio players

Of course, Eric Schwartz, an Ohio resident, made it to the show and delighted audiences with his legendary animations, put up on 20 inch monitors.

The convention hall was rounded out by a variety of other exhibitors ranging from sysops with everything from soup to nuts for sale to full-time retailers. And then, of course, they had to let the people in. It did get somewhat cramped at times and a patron on a Rasco nearly "killed" several people over an enormous eccessions as he tried through the proceedings, but he finally erupted

Pete performed his duty as head of state and gave the opening address for the show, in which he gave out suitable awards to Tattnay and thanks to the crowd, invited everyone to come to Germany for Computer '97, and shared the information about the DCE line of Amiga clone computers being developed under license.

It was the first many heard of the machines, and of course Pete was rewarded with applause. He was fairly straight with everyone early on in making it clear that he was not going to deliver any earth-shattering information.

On Saturday night, Jee Terre from Amiga Inc. along with Kermit Woodell of Nova Design and the ICOA's representatives in Fleecy Moss, Dean Brown and Andy Frink attempted to hold a meeting of developers, which unfortunately broke down rather quickly from its intended purpose. Hopefully, these things will be handled with a little more advance planning, RSVing, and screening of credentials in future.

While not present, Newtek's products were not totally unrepresented - TUGALLUG, a Tattnay/Fyer user group - had demonstrations running over the course of the weekend, and Proewe was ready to sell you a variety of tutorial tapes for Lightwave.

Newtek Bawl-out

In the November issue, I mentioned that every week a rumour starts that Newtek is dropping Amiga development. Right on schedule, it happened again, as a result of some poorly chosen words and a lot of fuel thrown on the fire by rash souls. It seems that at the recent Newtek Expo, Newtek's CEO made a remark in a somewhat private setting that the Amiga Flyer development team was currently engaged on another project.

Once this remark was repeated, it quickly blew some sort of "Newtek has cancelled its Amiga development" which quickly blossomed into "Newtek has dropped all support for its Amiga products". The public outcry and confusion got so great that I timely Newtek's CEO as well as its founder Tim Jenison, issued statements making a clear that there had been a misunderstanding, that the Flyer team had been reassigned to another

In a reveal that I hope we see more of, a full version of Kidstop, an educational package that succeeds in being entertaining without being pedantic, was on offer.

While the display unit had a touchscreen, Kidstop can be driven with the mouse (which more and more children are learning to use at early ages). And while making the trek overseas was unfortunately too much to ask for the European developers, particularly with Computer '97 looming just two weeks away, some relatively new products peaked their heads out at the MAE courtesy of some enterprising retailers.

Wender Computers brought a hefty supply of the new Define Lite DSP sound board and the 16-bit sound daughterboard for the Prosesse IV did make an appearance as well.

project for the time being but that Newtek and the Flyer team had every intention of getting back to the Amiga work in due course.

It seems that the rumors was need elsewhere and a Flyer software update had just been completed, making the programmers available for the time being.

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CD-ROM

Super CD-ROM 18



Welcome to CUCD18. This CD is crammed full of programs, games, utilities, mods and a host of other goodies. If you don't yet have a CD drive, this is your reason to buy one. Prices have never been lower and 650Mb of quality software each month is just too good to miss out on.

How much is there?

Personal Paint	1.6Mb	Graphics	25Mb
Foundation	22Mb	Magazines	30Mb
Treppen3	3Mb	Online	50Mb
CDSupport	80Mb	Previews	65Mb
CUCD	50Mb	Programming	10Mb
CDROM	15Mb	Readers	90Mb
Demos	8Mb	Sound	115Mb
Games	7Mb	Utilities	50Mb
		WWW	45Mb

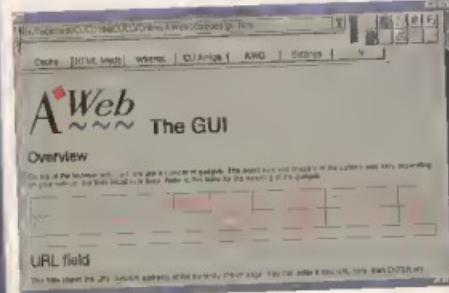
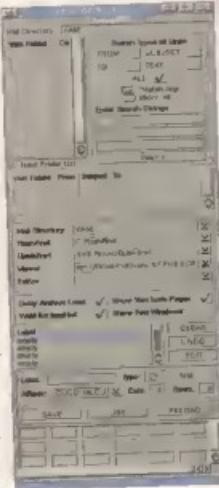
Making the most of CUCD18

All CUCDs are designed to be used whether you boot from the CD or your normal Workbench. If you boot from the CD, everything is setup and ready to go. If you want to access the CD from your Workbench you should first run InitCD. This sets up various assigns and paths needed by programs on the CD, so if you don't do it, things won't work. It doesn't make any changes to your system, or write any files to your hard drive, all changes are temporary and can be reversed by running InitCD again.

Your own custom CD

In the past you had to use whatever file viewers we set up on the CD since these had to work with off Amigas they were quite limited. From CUCD12 we decided to allow you to specify how the CD should work on your Amiga and included CDPPrefs in the CDSupport drawer. If you have never run this before you should be asked if you want to whom you run InitCD. CDPPrefs lets you specify which program you want to use to handle each type of file, graphics card users can view pictures in full 24 bit colour. Project64 users can listen to midi files through their midi card and people with sound cards can listen to mods with an AHI module player. It also means we were able to provide different defaults for Workbench 2.x users.

Once you have run CDPPrefs, your setting will be saved to your hard drive and will be used every time you use this CD or any other CUCD.



Highlights of CU Amiga CD 18



These are a few highlights of CUCD 18. The more time you spend looking through the CD the more you will find.

Foundation demo

Try out this brilliant new strategy game for yourself! There's misrule on the CD.

Graphics/Wildfire

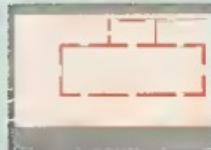
A new version of this effects processor that now works with a PPC as well as the standard Amiga CPUs. Wildfire was used to create several demos of extremely high quality that have appeared on previous CDs, with the power of PPC behind it you can expect to see some even better ones soon.

Graphics/MagnificAD

A full featured Computer Aided Design (CAD) program. This is a demo version with a few limitations, but it is still very usable.

Magazine/ Ultimate WB

All the utilities referred to in this month's Ultimate Workbench feature. There is every thing you need to make your own Workbench faster, more efficient, more attractive and, most importantly, your



own. If you need inspiration, we

have also included a selection of screenshots of different workbench setups in the WBPro drawer.

Online/Eucalyptus

Development continues on this new email client. Using ClassAct it has a very friendly interface.

Online/AWeb

A new version of AWeb 3.0 was released recently. The demo version is included here. In the WWW drawer there is a special CU Amiga version that has all the features of the full, commercial, AWeb, but for local pages only.

Online/News

A selection of last month's posting to the various Amiga newsgroups, plus a full archive of this month's postings to the CU Amiga mailing list. Anyone who posted to the list last month can look back and think



"Did I really say that?!"

Online/YAM Tools

Using MUJmaxx (as used for CDProfs) this program adds extra features to the YAM email program.

Previews/Tornado3D

The is a special demo of the new 3D rendering program, tornado3D, complete with a tutorial specifically written for CU Amiga readers.

Previews/Strangers AGA+Uropea+ FinalOdyssey

Previews of three new games from Vulcan Software.

Programming/AmigaE

E is a very popular programming language for the Amiga, with the power of C without the difficulty. It has been a long time since the last update, but here it is at last.

Sound/Samples/



WAVbeats

This is a massive collection of 16 bit samples, in WAV format. They are included for use with the sound articles in this month's magazine, but can be used with any program that supports 16 bit samples, such as SinEd.

Sound/SinEd

Another powerful sample editor. With this one and SoundProbe in the Magazine drawer sample fans are having a bumper month with this CD.

Utilities

The Utilities drawer contains so many different, and useful, utilities that it wouldn't be fair to select one or two as highlights. There really is something for everyone in here. Make sure you check out the commodities and Blanks drawers, and Directory Ops users can find the latest program updates, and a few other goodies, in their drawer.

WWW

A selection of sites from the World wide Web including CU Online



What's on this month's CU Amiga CD?

CUCD18, 666K free

InitCD

PPaint

Important!

Trapped3

CDsupport

Foundation



PPaint: Version 6.6 of Personal Paint, a special created just for CU Amiga. This is a much enhanced version of 6.4, containing many of the features present in the latest version 7.1. But you get this one for free!

Trapped 3: A brand new 3D texture-mapped game. This was rushed here from the Computer '97 Show in Cologne, just in time to go on this month's CUCD, making sure you have it in time for Christmas.

Foundation: CD users get the bonus of another brand new game. This is a special demo of the yet-to-be-released Foundation. It will run on a 2Mb A1200, but really benefits from more RAM and a faster processor. It needs either AGA or CyberGraphix/Picasso96 on a graphics card. Foundation needs to be run from hard drive, just drag the entire Foundation drawer onto your drive; you will need about 22Mb of free space.

CDSupport: This contains various support files such as mod players, anim players, GMPlay, MUI, ClassAct. Most importantly, this is where the CDPrefs program lives. With this you can customize your CUCD to launch your choice of program for each type of file.

CUCD: The CUCD drawer contains most of the CD contents; here is a selection of some of the contents.

COROM: An update to AmiCDFS, the recommended CD filesystem for use with CUCDs. Full indexes to all the Amiga CDs with a useful search tool. An even

larger collection of CDIDs, now archived with the for faster copying to your hard drive and a converter to use these CDIDs with AmiCDFS. Discus is another audio CD player.

Demos: Only three demos this month, all require AGA and a fast processor; certainly helps. The demo scene seems to have been a bit quiet this month, but expect some major demos in coming months.

Games: Another selection of joystick breakers, worms, levellers and cardinals. Also a couple of Star Trek variants and a database on the Star Trek shows and films.

There are not as many games in here as normal, but there are several major games elsewhere on the CD, and a few more in the Readers section.

Graphics: This month we have a demo of WildFirePPC and an excellent CAD program.

MagnificCAD: There is a further collection of ARexx scripts for DrawStudio and some very detailed Lightwave objects of the Earth and Moon. There are also a few more icons and backgrounds, just in case you didn't get enough last month!

Magazine: This drawer contains all the support files for articles in the magazine. The source code for the C tutorials, demo ver-

sions of PicManager, SoundProbe and WebPlug, some AIRlink and PPC exter, and all the utilities for the Ultimate Workbench.

Online: Archives from the last month's postings to the CU Amiga mailing list, together with a selection of news from the Amiga newsgroups, Web page and graphic design tools, a mailing listserve and an IRC bot. Also the latest Amiga Index.

Previews: Special previews of Final Odyssey, StargazersAGA and Utopia 2. A demo of a new 3D rendering package, Tornado3D. This was especially created for CU Amiga with an extra tutorial written just for you. There is also a large selection of demos from F1 Licenceware.

Programming: A new release of Amiga E, the popular programming language for the Amiga. Also on the CD is ARexxGuide, a complete guide to programming in ARexx in AmigaGuide format, ModemLink for making modem linkable games and ClassMate for creating ClassAct GUIs.

Readers: A bumper collection of programs, games, mods, emms and pictures sent in by CU Amiga readers. Is your work here?

Sound: Most of the Sound drawer is taken up by a huge collection of samples, to go with this month's fea-

tures. You also get new versions of HippoPlayer, Sined and ARI, the re-targetable audio system.

Utilities: A large collection of utilities this month, with over seventy items. This includes the latest updates for Directory Opus, Magellan, Workbench enhancements, commodities and screen blankers.

WWW: Demo versions of the big three browsers, with a special version of AvWeb. A selection of web sites to view with them including Football and Astronomy sites, in addition to a selection of Amiga related sites.

Disk doesn't load?

If your CD does not load contact DiskXpress on 01451 816788. If they advise that the CD is faulty send it along with a SAE to: CU Amiga Magazine Disk Returns, DiskXpress, 7 Willow Court, Bourton Industrial Park, Bourton on the Water, Gloucestershire GL54 2HQ.

Please note that some of the CDs will not auto-boot on systems other than CD32s, so try loading it along with Workbench first.

CUCDs will work with almost all Amiga configurations and filesystems. However, we recommend older CD filesystems be replaced where possible. A non-working program is not an indication of a faulty CD!



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AMIGA TRAPDOOR

AMIGA TRAP

Personal Paint 6.6



Welcome to Personal Paint, one of the most powerful and best supported paint and animation packages on the Amiga today. Before you settle in and start creating your own masterworks, there's a few basics you might want to have sorted out first.

Loading instructions

Personal Paint, you can run this straight from disk 172 after booting from your hard drive. To install it to your hard drive, make a directory called PersonalPaint6.6 on your hard drive and then copy everything from disk 172 into there. For example:

```
cd work:  
mksubdir PersonalPaint6.6  
copy d0:172 work:PersonalPaint6.6
```

That assures that the partition on which you want PPaint installed is called Work. Change this to your preferred partition if you have named your hard drive differently.

You'll find three pictures on the Trapped III disk to get you started.



▲ Here's a new trick: circular text is just one of theokinetic tools available from the new range of Albrex macros - don't worry, no Albrex knowledge is required though!

DISKS

Personal Paint 6.6



If you're comfortable using another Amiga paint program such as Deluxe Paint or

Brilliance, you're in good shape as Personal Paint has modeled its interface closely after DPaint, and users of Brilliance should be familiar with the same concepts. PPaint's power in some areas goes far deeper but first things first.

New since 6.4

PPaint 6.6 offers a number of enhancements over earlier versions, in particular PPaint now has an ARexx interface to allow for powerful effects, supports more image formats without the need for datatype end has built-in "CycleToMenu" and "PopUpMenu" gadget capabilities.

The interface

Keyboard shortcuts abound for most anything you could do in PPaint, but since you're going to be drawing with the mouse anyway it's best to start out using the icon and menu controls, although one important key to remember is Shift, which restricts your mouse movement to 90 degree angles (strictly horizontal or vertical) - this can come in very handy for lots of things.

On the left side of the screen is your toolbar which leads down to the palette selection. As well as the

toolbar you've also got the Personal Paint menus.

Project From here, you manage the large details - what image to work on, what format to save in, and what screenmode to work in. This is also one of the ways to access PPaint's powerful Image Processing mode.

Brush PPaint's brush handling to allow the creation and loading of custom drawing implements.

Animation From here, you manage the creation of animations (ANIMs). PPaint also supports anim-brushes which alter a brush's appearance as frames go by.

Text Special functions for adding text to your pictures.

Color The color menu deals with palette management and reduction, the creation of 'stencils' (which can be used to protect certain areas of your picture while you work on others) and allows you to track colour usage.

Settings All the other preferences you could want are stored in this menu including virtual memory management.

In the toolbar itself you'll find the pieces you need to actually get some work done. When working in the toolbar, the key thing to remember is that while you select a function with the left mouse button clicking the right mouse button will usually allow you to access a self-



▲ Personal Paint doubles up as an image processor as well as a paint package. Click the right mouse button on the icon next to the 'a' as the toolbar to affect an effect.



gs menu or custom configure an icon.

Along the top two rows are your brush selections. The top four are your standard circular brushes and the bottom row has a '1' along with three square brushes. The '1' is a special case but for the other seven you can simply select and use the brushes with the left button right-click to adjust the brush to a customized elliptical or rectangular shape. To shape them right-click on the brush. Move the pointer to the drawing area (the pointer should have a boxy tail) then hold the right mouse button and move the mouse to get your desired shape.

By right-clicking on the '1' you can use one of nine custom brushes you've previously set up in the Brush menu.

These are your general freehand drawing tools. On the left is a 'dotted' line while the right gives you hard lines. Notice the horizontal line running through this button. It is really two buttons – on the top is the button for straight lines, on the bottom is the button for 'free fill lines' which automatically fills in patterns defined by a line you trace on the screen. You can create some stunning effects just with creative use of this feature. Be sure to try right-clicking on this and all the other buttons to get an idea of the special customizations you can apply to the basic building blocks.

Bezier curves (left) are the standard way to generate complex, recreatable shapes and waves. Or, if you fancy just draw a straight line with the other tool.

Circle and rectangle tools respectively. Note the top/bottom distinction again, for open or filled shapes. You can define a gradient or other pattern for the fill with the right mouse-button menu.



Slightly more complicated shapes here the ellipse and the freeform polygon. The ellipse tool works like Circle or Square (and you might want to experiment with the Shift key while setting up your ellipse). The polygon allows you to draw successive, connected straight lines. You can exit the mode by closing the polygon, selecting another paint tool, or by hitting space.



The spraycan and the 'Hill can' respectively. The spray gives you an airbrush scatter effect, while the hill can pours paint into a closed region you select with the pointer.



On the left you can enter PPaint's font engine to incorporate Amiga bitmap or vector font messages onto your image, be it for credits or for some other purpose. That gradient pattern on the right is another way into PPaint's image processing menu, which gives you the power to apply numerous intriguing effects to your image. This is one of the features that really sets PPaint apart from the crowd. Right-click on the button to give you choices, and get a different shape to apply to your effect by multiple left clicks on the button.



That crown over there is the international symbol for ARexx, letting you call up interesting external macros for your graphics work. Be sure to check out the Vector Text feature – you can get some excellent text looks without dealing with the cumbersome Amiga font engine. The right-hand button allows you to define a brush



From here, you control the zoom feature of PPaint, for work in tight spots.



Finally the tools you hopefully won't use too often. Click on the left to throw away your work and clear the screen. Click on the right to undo a mistake.

Now you're ready to get started with PPaint. Be sure to read the online documentation, and of course once you've completed your masterpieces don't forget to submit your work to CU Amiga for inclusion in our Art Gallery! It's paint, and this time it's personal.

Trapped III



This is one of the best cover disk game demos we've ever had. Trapped III was inspired

by the request from fans of Trapped I and II to take the wonderful 3D engine and make the gameplay more action orientated. Trapped III has the most technically advanced 3D engine the Amiga has ever seen, with stunning lighting effects and diverse level designs. It makes the likes of the Alien Breed series, Gloom and Breathless look basic in the extreme. You don't necessarily need a high powered Amiga to run

Trapped III but it has been written to take advantage of all the horsepower you've got on offer, so better CPUs allow for faster screen updates. You can alter the size of the screen to get it running at a reasonable speed on your setup. There are four different basic display settings I choose from ECS, AGA, Graffiti and Picasso95. The basic controls are mouse or cursor keys for movement, ALT to shoot and the



number keys select different weapons. The function keys call up various options screens and the H key displays the help mode. To quickly alter the screen set up, use F1 to cycle through different panel sizes and + and - to expand or shrink the overall display size.

To install it to your hard drive drag the "DragMeToHD" icon to where you want it installed and then double click that icon.

Upgrade to Personal Paint 7.1

There are plenty of reasons to upgrade your Personal Paint 5.5 cover disk to the very latest version 7.1, such as:

- New Improved File Formats
These include GIF (licensed by Unisys), 24-bit datatypes, PBM and TIF (both IHM graphics directly from Sony PlayStation CDs with extended TIF saving options for developers)

- Professional Internet Features
AmigaGIFs are supported and there's a map editor, plus tools for retaining image quality with reduced size/colour files.

- 151 ARexx Commands
Dozens of scripts available.

- New Plug-In Library System

Makes it possible to add input/output modules and replace other parts of the system.

• Automatic Thumbnails

That's just a selection. See the ReadMe.txt document on the cover disk for a more complete list. The upgrade is being handled by Weird Science and comes on CD-ROM only, priced at £19.95. Contact Weird Science at: Weird Science, Q House, Troon Way Business Park, Humberstone Lane, Leicester LE4 5HA. Tel: 0116 246 3800. Fax: 0116 246 3801. E-mail: sales@weirdscience.co.uk

1997 Again...



JANUARY

Phase 5 drop the A!Box bombshell with one of the longest, most technical press releases ever seen. CU Amiga picks up the pieces:

...and puts them back together in the shape of a brand new Amiga with the catchily named "Caliprinha" custom chip at its heart. The dazzling array of features leaves many excited but confused and bewildered. Prototypes of their Power! cards go on show in Cologne

Quote of the month

"I think this festive thing has gone way too far."



HIGHEST SCORING REVIEW:
EXECUTIVE

97%

Commodore enjoy phenomenal success as they announce the sale of the first 1 million UK Amigas

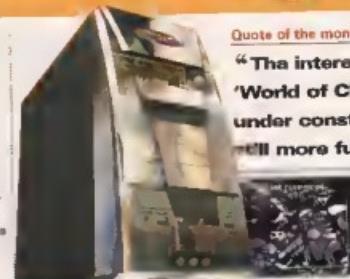


FEBRUARY

ViScorp abandon their bid for the Amiga as QuikPak become the new front runners according to the highly active rumour mill.

ViScorp's Carl

SesameStreet resigns and publicly expresses some strong opinions regarding his ex-employer in a notorious E-mail. CU Amiga visualises the A!Box as a sleek golden tower for its cover illustration and examines its impact on the Amiga scene



HIGHEST SCORING REVIEW:
UFO

93%

Tony Horgan

No scandals, but Another World was released and Amiga activity is booming

Amiga Centra Scotland releases the Netrunner "affordable" 24-bit graphics card, priced at £2,000



MARCH

Speculation continues regarding ownership of the Amiga. QuikPak start to make ambitious noises about plans for the company they have not yet

bought, even going as far as to announce a new Amiga range, and some quarters of the press prematurely hail them as the new Messiah. A date is set for the London World of Amiga show. ViScorp suffer more high level staff losses with the departure of Bill Buck

Quote of the month

"The only way you could have gotten this far is by walking around tha shopping mall dressad in women's clothes"



HIGHEST SCORING REVIEW:
1497 (PD STRATEGY)

93%

We made it through in the end! 1997 was a year that tested the mettle and loyalty of the Amiga scene to the max. Allow us to present the edited highlights. Bear in mind our definition of time is based on the issue dates of CU Amiga which is why, for example, the 'World of Amiga' show crops up in the July entry. Anyway, on with the show...



APRIL

As the official Amiga situation appears to go nowhere fast, third party amiga with plans for new 'Amigas'. Co-operation is promised from the developers of the

MOS and pOS projects. CU Amiga tracks down the mythical TFX and promises to display it at the forthcoming World of Amiga show, whilst an Amiga Quake game engine appears very briefly on the Internet before id software take action.



Quote of the month

"This is no Ridge Racer, more a flight simulation on wheels, going round tracks, in a racing car?"

50 Best Amiga Games

HIGHEST SCORING REVIEW:
ALMOST EVERYTHING

A good month for games on Project X gets 82% while the original Clump Manager scores 84%.

92%



MAY

Gateway buy Amiga. In a shock move that appears to come out of the blue, just in time for a scoop announcement to be inserted into

CU Amiga as it rolls off the presses. Amiga future looks "Bright" elsewhere after a healthy turn-out at the CeBIT show in Hanover, Germany, with Amiga clones and compatibles materials in pre-production form. Everyone gets cautiously excited about it all.



Quote of the month

"Every time I log on to collect my E-mail I get some prat in America trying to sell me something"

Net God

HIGHEST SCORING REVIEW:
LIGHTWAVE 5

A4000 is previewed. Very reasonable future Amiga wish list is ignored by Commodore

94%



JUNE

Gateway 2000 remain tight lipped about their reasons for the Amiga buyout and their proposed plans for the future. Speculation reaches an all-time

high as the key players from within the Amiga scene are quizzed for their reactions to the news.

Sadly the UK's first Amiga magazine, Amiga User International, publishes its final issue. CU Amiga's popular DIY tower Amiga series reaches its conclusion.



Quote of the month

"3% said they would like to see more coverage of food in CU Amiga"



HIGHEST SCORING REVIEW:
PICASSO IV

Commodore release the A600 and the AG76 CD-ROM drive

94%

97%

No scand...
that Another
World was
released self
Amiga activity
was booming

93%

Amiga Cards
Scattered
release the
Hartington
"affordable"
24-bit graphics
card, priced at
£2,300

93%

A good month for games on Project X gets 82% while the original Clump Manager scores 84%.

94%

94%



JULY

The World of Amiga show in London goes down as a big success, with Phase 5 joining forces with CU Amiga to display their PowerUP cards in the UK for the first time. TFX is also present and correct. Gateway's press conference is appreciated but reveals little other than their willingness to license the Amiga technology to third parties, disappointing those hoping for an enhancement of a new Amiga.



Quote of the month

"I own two pet chinchillas and have become a hobbyist chin breeder - although not necessarily by choice"

Eric Schwartz



AUGUST
Good things are happening. As Phase 5's PowerUP cards near completion, CU

Amiga explains just how fast these little babies are, whilst reporting on the growing potential of these super-machines. Index Information and Micronik both announce their new officially licensed Amiga clones. The model from Index looks more like a large external hard drive than an entire computer.



Quote of the month

"You thought a 68060 was fast? You'll be able to tile your bathroom with the things before long"

Tony Horgan

Commodore research "cracking deal" in which an £800 can be part exchanged for £200 off a new CDTV (retail price £500)



SEPTEMBER

Chinese company Lotus Pacific announce their acquisition of the rights to

produce Amigas for sale in the Far East, while Gateway 2000 dispute it. Speculation that Lotus got these rights from "a bloke down the pub" is countered by their version that goes back to Escam selling them in 1995 on to a "middle man", REC, who then passed them on to Lotus. Lots of hot new games on the horizon



Quote of the month

"Grasshoppers have got six legs - connected at the thigh, they've also got a pair of wings - but they cannot fly!"

Tony Dillon



MICROSOFT REVIEW

MICRONIK MG-25 GENLOCK

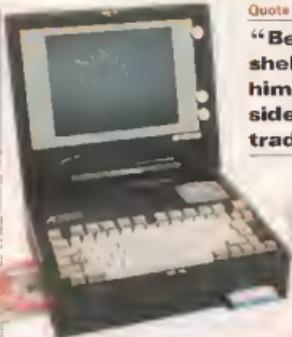
95%

Amiga gets £100 taken off its retail price and falls to £200 in speculative sales sheet more than 2000 models

AMIGA OCTOBER

TFX is here!
Overshadowing
all other Amiga
events, CU
Amiga exclusively
releases
TFX, the best
Amiga game

ever, with the October
issue. For many this is the highlight of
the Amiga year. Gateway 2000 set up
Amiga Inc in South Dakota USA to act
as research and development, freeing up
the German based Amiga International
to concentrate on sales and marketing.
CU Amiga officially becomes
the UK's biggest selling Amiga magazine
while Amiga Computing and
Amiga Review magazines close.



Quote of the month

**"Before the bogey
shakes off the lock, let
him have it with a
sidewinder up the
tradesmen's entrance"**

TFX guide



A4000 is
unveiled at
short notice to
a full crowd,
catching the
press
unawares

95%

95%



The first batch of
PowerUP
PowerPC cards
finally become
available. An
A1200
PowerUP card
with an
optional "graphics
card" add-on is also announced.
CU Amiga's best DIY project yet, AIR
Link, sees a free PCB stuck on every
issue and offers the possibility of con-
trolling a range of devices from an
Amiga. A renewed mood of optimism
prevades in the Amiga trade end
amongst users. One of the year's major
software releases turns up in the shape
of Nova Design's Aladdin 4D

Quote of the month

**"... combine it
with this
month's DIY
project and
then make your-
self the world's
first remote
controlled
portable Amiga
in a shopping
trolley"**

Backchat



A4000 arrives
as the UK, while
the CDTV is
reported to be
"taking off"
with 12,000 UK
sales and
10,000 each in
Italy and
Germany

96%

The A1200
turns up, but
curiously the
Amiga press
seems more
interested in
playing with
morphing soft-
ware



Everything
turns up
at once
at Click-
BOOM's
conversion
of
Myst,
phase 5's

PowerUP and even Champ
Manager 2 arrive in the same
month that people start to ques-
tion the longevity of the
PowerPC range. Cloanto
announces the Amiga emulator,
defiantly named Amiga Forever,
for the PC. Amiga users vote
Monkey Island 3 top of the list of
games they want to play



Quote of the month

**"John Kennedy can't
find any real people,
and so uses himself
instead"**



97%

SOFTWARE

Amiga Forever

Commercial Amiga emulator for the PC

Includes Amiga operating systems ROMs and simulation software pre-installed. Picasso96 driver (8M/16M/32M) and "Amiga Explorer"



£ 49.95

AWeb II V3.0

Surf the Web
on your
Amiga!

£29.95



Burn-It
Powerful CD-Burning software which is available in Track-at-Once and Click-at-once versions. TAD will fulfill most CD-Burning requirements, but DAO is required to produce 100% duplicates or no standard pre-prompt gaps.

Burn-IT TAO £ 49.95
Burn-IT DAO £ 109.95

Burn-It



PCx - Software PC Emulation - Advanced 80x86 PC Emulation



PCx



£ 49.95

Art Effect

ArtEffect uses the concepts of industry standard Art packages and brings them to the Amiga V2.0 now with Layers and Virtual Memory!



£ 59.95
£ 119.95

ArtEffect V1.5

Art Effect V2.0

Storm Software

StormC V2.0 Base Package
Non Commercial license

£ 119.95

StormC V2.0 Base Package
Professional unrestricted license

£ 179.95

StormPowerASM V3.0

£ 99.95

StormWIZARD V2.0 - GUI creation

£ 99.95

Add-on Modules (All require Storm C base package)

StormC V3.0 - pOS-Module

£ 49.95

StormC V3.0 - PowerUp-Module

£ 119.95

StormC V3.0 - PowerASM-Module

£ 59.95

(Call for upgrades for any of these packages)



Fusion

FUSION - The ultimate Software Mac Emulation

Run practically all the latest Mac software. Latest System 8.0 support! (Macintosh ROM is required). Why consider a Mac when the Amiga can do it for you!



£ 49.95

FUSION



Picture Manager Pro

Picture Manager

All-in-one graphics tool for automatic format conversion, scanning, printing, image processing, PhotoCD access and more!



£ 149.95

Picture Manager Professional V4

Tornado 3D

Tornado3D is a superb Rendering and Animation package



£ 179.95

HARDWARE

Various

Monitor Adaptor (23-pin male to 15-pin gh)	£ 14.95
VGA Adaptor (23-pin Amiga to 15-pin male)	£ 14.95
Floppy Drive 1.4Mb 3.5" (1200/4000 1" high)	£ 54.95
Floppy Drive 1.4Mb 3.5" (1200/4000 1" high) Ext. (No patch)	£ 59.95
8 MB 32bit SIMM RAM	£ 29.95
16MB 32 bit SIMM RAM	£ 44.95
32MB 72 pin SIMM RAM	£ 59.95
1.2Gb IDE Hard Drive	£ 129.95
2.1Gb IDE Hard Drive	£ 159.95
12X IDE CD-ROM	£ 80.95
24X IDE CD-ROM	£ 78.95

CatWeasel Floppy controller (A1200/A4000)	£ 49.95
Use inexpensive PC floppy drives (IDE/HDD)	
IDE/Fix 97 - Bufferd A1200 4-Way IDE VF	£ 34.95
Includes registered Amiga software	
CatWeasel Zorro	
Six IDE devices + All Centreset functions	£ 69.95
Buffalo	
Four IDE drives for the A4000	£ 44.95

Siemens V2.5 Software packs	£ 44.95
TCP/IP, RTG and CyberGraphX support software	£ 44.95

Picasso



Picasso IV

Without doubt the most stunning graphics card yet for the Amiga. No wonder C64 Amiga claimed this to be "The God of Amiga Graphics Cards!"

Integrated Flicker Free 4Mb EDO RAM
Autobahn Zorro II or Zorro III

£ 249.95



Picasso II+

The cheapest route to fast, high resolutions and high colour graphics! Zorro II

£ 125



Trapped II - Stunning high end 3D game!

NeMac IV - The Directors Cut

Shadow of the 3rd Moon - Voxel Flight Sim

BrainKiller - 3D Shooter

Sword - Novel Platform Game



BrainKiller

£ 24.95

£ 24.95

Shadow of the 3rd Moon

£ 24.95

£ 24.95

Christmas Compos

The turkey filled days of Yule are approaching rapidly. 'Tis the season for giving, so get your postcards out and get scribbling - it's competition time!



We've shown a lot of restraint this year. No photos of the team wearing paper party hats, no rendered reindeer in the margins and we even persuaded our publishers against putting a model in a Santa suit on the cover. We do, however, like getting drunk, sleeping through the Queen's speech and eating turkey for a week and a

half as much as anyone. So we have got together with some like minded Amiga companies to bring you the Christmas Compo Bonanza! All the normal rules apply: no entries from anyone in the employ of Emap Images or the relevant company, the editor's decision is final, the deadline is January 31st 1998 and all complaints will be ignored. Merry Christmas!

Alive Media

This new games house and specialist retailer of old and hard to find Amiga books and games, publishers of *Blade* and the forthcoming *Hannibal*, has offered us £5 special Christmas Hampers to give away. Each contains an assortment of games, hints and tips books, plus a copy of *Blade*, which scored 86% last month. To win one of the hampers, just tell us in 20 words or less what you'd like for Christmas. Answers by 31st December 1997.

ALIVE

Mill Harbour,

Alive Xmas Compo,
CU Amiga Magazine
37-39 Mill Harbour,
Isle of Dogs,
London E14 9TZ

Blittersoft

For years Blittersoft have supplied hardware and software for the high end user. They've entered co-operation with Index Information over the forthcoming Boxxer computer. In this month's issue you could get yourself a not quite so good new computer for Christmas by winning one of two copies of Fusion the top Mac emulator, along with 2 copies of Picture Manager pro, reviewed on page 82 of this very issue. To win one of these prizes just tell us what a blitter rip is. Answers on a postcard to:

Blittersoft Xmas Compo,
CU Amiga Magazine
37-39 Mill Harbour,
Isle of Dogs,
London E14 9TZ

Epic Marketing

Epic Marketing are a leading producer and distributor of Amiga CD-ROMs, and have recently moved into games in a big way with their Isilon games label. They have offered a juicy £100 worth of software to the winner, with 10 runners up getting any title up to £25 value. Prizes will be awarded on a first come basis. Postcards to:

CU Compo,
PO Box 637,
Swindon,
Wiltshire, SN2.

EPIC MARKETING

CD-ROMS

Weird Science

Weird Science is a company with its fingers in more than a few plum slots. They have produced numerous successful CD-ROM titles and their close co-operation with German CD-ROM firm Schatztruhe GTI has given them UK distribution of the famous Amiga CD-64. Weird Science are giving away an amazing complete Amiga collection - AmiNet sets 1-6, to 3 winners - and if this great price wasn't enough, they are offering a chance to win one of the i Network PC™ systems they are offering. These hybrid software solutions allow files to be easily and freely exchanged between the Amiga and a PC. Funnier postcards win the prizes! Mark your postcard with "PC" or "Network PC" and send them to:

Weird Science Compo,
CU Amiga Magazine
Isle of Dogs,
London E14 9TZ.

Weird Science

Guildhall Leisure

Guildhall have been THE software distributor for the Amiga for ages. They have recently published titles such as Street Racer and Ultimata Gloom. They are also publishing CD re-releases of titles such as Civilization, Daunt V, and Ultimate Blitz. Guildhall have kindly offered to give away one of the above mentioned titles to the first 20 postcards pulled out of a hat.

Postcards to:
Guildhall Xmas Compo,
CU Amiga,
37-39 Mill Harbour,
Isle of Dogs,
London E14 9TZ.

Coupons

£10 off

Remixing with the Pros

Dex and Jonesey have proven themselves to be some of the best dance remixer in the business. How do they do it?

Those undisputed stars of the club remix scene, Dex & Jonesey have already proven that a couple of Amigas and a copy of Protracker is enough to launch and sustain a career in the music business.

An inspiration to anyone struggling to express their ideas via a basic Amiga set-up, they've stayed true to their roots and not abandoned the machine that helped them crack the big time.

Top tip: echoing samples

It's always good to echo samples as it gives them more feeling and depth. For the vocal echo of 'Open your mind' I actually used two samples, the first saying 'Open your...' and the last saying 'mind'. This meant that I could freely re-trigger the 'mind' sample on every beat and have full control over the volume of the echoes.

When we first exposed the Dex & Jonesey phenomenon back in the September 1996 issue of CU Amiga, they were riding high on the success of their remix of Josh Wink's Higher State of Consciousness which measured an impressive number 7 placing in the UK charts. Since then they've seen the remix work continue to roll in from the biggest names, with some recent jobs including makeovers of Hardfloor's awesomely classic 'Appearance 1' and Juras's 'Open Your Mind'.

We spoke to Dex, otherwise known as Andy McEvily, to find out the secret of their success:

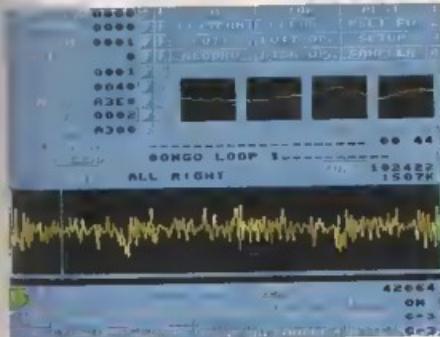
CU Amiga: How do you get your remixing

jobs? Do you have an agent or manager who gets work for you?

Dex: We originally started producing our own records as a result of our DJing work. We both had a few ideas and we knew the basic structure of dance records were all generally similar, so we decided to go ahead and make our own tracks. Our track entitled 'The Beginning' was signed to Judge Jules' label 'Baug International' and this led us to the Josh Wink situation.

We knew 'Higher state of Consciousness' was inevitably going to be re-released, so we took my original 'Sticky Rhythm Import 12', and remixed it. We took it to Jules and it soon became the official remix. From there on we found a representative in the form of John Cecchini at Red Parrot Management. We knew him very well from his days at Zeta, Dartford (the club at which we were resident DJs). John got us work from various labels and handled all enquiries about us.

CU Amiga: Do you accept any remix job



▲ Good old ProTracker is at the heart of every Dex Is Journey remix



▲ In fact, two Amigas running two Protrackers are used for the job to double up to eight tracks

Top tip: jazzing up the percussion

When adding claps and hi-hats, don't just put them in at the standard places. Try moving them around or echoing them. For example, if you've got a hi-hat between every beat try adding a hi-hat 1/4 beat either side of every one, at half the normal volume. This gives a nice funky variation, and this can be used with claps as well.

that's offered to you (assuming the financial deal is OK) or do you pick and choose? Dex: We don't accept any remix offer until we have actually heard the track. We only accept tracks that we believe we can create a good remix of and will not ruin the reputation we have been building up. If a track does not appear to have any hooks or original parts we do not accept it, as it would mean us basically creating our own track which will not be released under our name.

CU Amiga: Once you've got a remix job to do, are you given a brief from the record label as to how they want it remixed, or do they just leave it up to you?

Dex: Generally once we've accepted a remix offer, the record label involved will tell us roughly the style in which they would like us to remix the track, whether it be commercially based vocal club style, banging dub etc. Apart from this they leave us to our own devices and wait for the result, which is the way we prefer working.

CU Amiga: What does the record label supply you with to do the remix?

Dex: If the track we are remaking is a new track, then we would normally receive a cassette copy of the current mixes and we then let them know whether we have accepted the mix or not.

If the track is a re-release or is familiar to us, such as Outrage's 'Tall 'n' Handsome' then we would know instantly whether to accept the offer or not. Either way as soon as we have accepted a mix, the parts (loops, vocals etc.) are sent to us on a DAT if they are available, and we can then get straight on with the remix.

CU Amiga: Do you have any standard method of remaking a track that you use every time?

Dex: Generally our first step is to sample all the parts we have received. In the case of a very vocal-oriented track, such as Phil Collins' 'Dance Into the Light' we decide which vocals to use and which not before we start sampling. The next step is to decide on a BPM according to the original track and style of remix required. Once the BPM has been agreed, we lay down all the samples and adjust them so they loop correctly at the new tempo. Theoretically all the samples should receive the same adjustments, but this is not always the case unfortunately.

We then basically decide on which beats, loops, bass sounds etc. we are going to use and put everything on a Protracker block. We then cut out each element individually and in groups to decide which combinations of samples work well together and which don't.

After this is all done it's on to structuring the track as you would hear it in the final version, then some inspiration sets in and no two remixes ever go the same way.

CU Amiga: How do remixers get paid?

Dex: Most remixers get just a one off payment and no royalties are paid. In the case of 'Higher State' we had agreed a bonus payment if it got into the top 20 in the national charts. It actually went straight in at number 7.

CU Amiga: What advice would you give to aspiring producers and remixer?

Dex: The main advice production wise is obviously not to copy anyone else's style but to try to create a style of your own. Don't be afraid of trying different techniques. Also, read the manuals or text files that come with the programs you are using; they will help you a lot.

Before I had even bothered to take a look at the text file that comes with Protracker, I was having to enter in all of the volume commands for snare drums one by one (by typing C01, C01, C02 - for 128 lines) until I finally realised that you can enter one line and use the ALT key with - + or / to change the values without having to enter them all manually. It does save a lot of time, believe me!

CU Amiga: List the gear you use at the moment.

Dex: The Usurus remix was done on the same basic equipment as Higher State of Consciousness: 1 Amiga 500, 1 Amiga 1200, 1 Realistic SSM 2200 mixer, 1 Sony TCD-07 DAT machine, 1 Technics 1210 turntable, 1 GVP DS8+ Sampler and ProTracker 2.2s.

Top tip: background noises

A little trick I sometimes use and indeed I did in this remix was to copy the bass note to a spare sample slot and then make it a few octaves higher. This creates a sort of bleep sound which I used in the first break to give an extra sort of depth. It doesn't really do anything for the song but it's there and subconsciously you notice it.

Of course you don't have to worry about any problems with the key because it is actually the bass sample which you've tuned already but it's just a lot higher. This technique can be used with any sample that is in key without any major worries, apart from loops for obvious tempo reasons.

A remix in the making: Open Your Mind

Usura's Total Recall-sampling melodic trance anthem 'Open Your Mind' has recently been revamped and re-released with the help of a rather harder than usual Dex & Jonesey remix. Andy McEniry takes us through the process from start to finish and divulges more than a few handy hints along the way...

1. Sample your woes

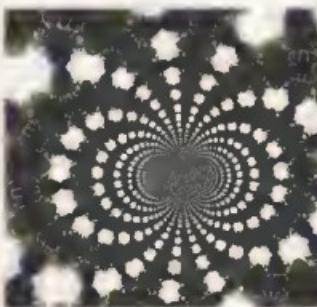
The first stage was to sample the various parts of the track and get them in sync with the chosen tempo, in this case 136 BPM. When I approached the next stage, which was creating one page with all the parts on it, I noticed that the main loop was six bars in length and not two, four or eight which is generally regarded as standard. The way the loop was structured was that the first four bars were the same but the last two had various note changes. All I had to do was work out these changes. The obvious way to do this was to play a bass note alongside the main loop and spot what changes were required. The bass notes sample I was using was in key when triggered by the E key on the Amiga (which happens to appear as the E note in Protracker). I played the six bar loop over and over again until I had worked out the different notes required.

2. Creating the bassline

With the note changes sorted, I now went on to creating the bassline. I decided to go for a fancy bassline rather than a basic bass-note between each beat. The track was in key with my bass sample when triggered with the E key note, this does not mean it is actually in the key of E, it's just that I sample everything using the Y Key for better quality - 27.92kHz.

3. Sourcing the drumloop

Quite often, as in this remix, no drumloop or percussion was supplied, so the hunt for a drumloop was once again started. I have quite a vast record collection and that means a big selection of loops. After a little search I



finally found a volunteer Moby's 'Go' provided the answer, so I sampled it up. There are two main rules I try to stick to when sampling drumloops and here they are:

a) Always try if possible to sample the loop at the same tempo as your track. The reason for this is that you should not have to adjust the pitch control in the program, which means you do not lose quality unnecessarily and also if you have more than one sample of the same length and they are all at the same pitch you can mix the samples together which will free up one of your channels allowing you to include an extra element. This is where the pitch control on the Technics 1210 record deck comes in useful!

b) Sample the loop with the bass cut out using a graphic equaliser. The reason for this is to prevent phasing or creaking of two or more bass drum beats. You can of course boost up the midrange or treble using the equaliser to give the loop more kick. This

also gives you freedom to use the rest of the percussion in the drumloop and then add a bass drum whenever you want to.

4. Structuring the track

With the main loops in key and drumloops sampled I was ready to start to structure the track. When creating a record that is aimed to be played at nightclubs, you need to consider the DJ has to be able to mix it in with out much of an effort, so for this reason I gave 16 bars of beats before the bassline came in. I could have let it go for longer but you have to remember that when it's being played on a CD, for example in someone's house, they don't want to listen to two minutes of plain beats and loops, so a compromise has to be reached and between 16 and 22 bars I regard as acceptable.

Obviously you don't want all your percussion and drumloops in with the beat from the off, otherwise it has no way of progressing. If you listen to the intro you will notice that eight bars after the bassline kicks in, extra percussion comes up. In fact I had only used the first half of my drumloop before hand (one beat in length) and at this point I let it go the full length of two beats. This is a good way of making extra sounds appear without having to have another free channel!

With the DJ friendly intro gone, I decided to go into a little drop to stop the beat from getting monotonous and I also brought up the little bleepy noise as described in the Top tips. Then I also brought up some little sound effects that I found on a sample CD just to give more life to the track. Next it was time for the drop'.

The only requirement asked by Malarkey records was that the general dynamics of the original drop were kept, as all the other mixes so far had gone off at a bit of a tangent. Once all the elements had been included it was just left to decide how to break out of it all and make the rest of the track different. There are thousands of possible combinations for how a track could go, and sometimes I think I've tried them all but there is always something new to do and that is the main objective, find them and use them! ■

Andy McEniry

"Open Your Mind" - Available now on Malarkey records.

Workbench

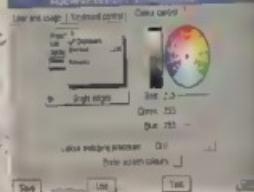
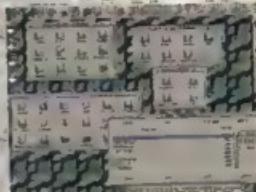
**Don't wait for
Amiga International
to release a new
Workbench, revolutionise it yourself
with the help of the
ultimate Workbench
enhancement pack
on this month's CD**

With the Amiga first came out, Workbench was really quite revolutionary, despite what people may say about 1.3 now. In 1989 we got Workbench 2.0 with its more integrated white/grey/black/blue colour scheme and a host of other improvements, such as commodities.

Finally Workbench 3.0 arrived with a lot more colours and a few other enhancements. That was in 1992, and very little has happened since. Workbench 3.5 should be released by Amiga International sometime in 1995 but there's a lot more you can do with the current Workbench with the addition of a few well chosen programs to your WBStartup drawer.

This article will show one of the possible routes to building the "Ultimate Workbench." This will enhance both the appearance and abilities of

▼ left to right.
Before: the tan
gray and blue...
After: fully
tautened up and
ready for action.
Splice things up
with MagicMend.



ToolsDaemon

While you can add icons to the single Workbench Tools menu, this is very limited. ToolsDaemon allows you to create as many new menus as will fit on your screen. You can have separate menus for utilities, games, Internet, prefs programs and so on. ToolsDaemon adds its own preferences program to the Tools menu, and from here you can add as many menu items as you want. The preferences editor uses drag and drop, just drop a program icon onto the window and it will be added to the menus. I have all my preferences programs available from a single menu, which I created by dropping each icon from my preferences drawer onto the window. Combined with Magic Menu to alter the way the menus work, you can have a very powerful menu system.

Looking good

Anyone who spends a lot of time using their computer will agree that a pleasant working environment is important, and there is quite a lot you can do about this with the standard Workbench software. Using the system preferences programs Font, Screenmode and WBPattern, you can alter the basic appearance of Workbench to suit your taste. However, there are some points to consider:

Running a large 256 colour AGA screen will slow down your Amiga, even if it has a fast processor, and using a large backdrop picture can use lots of Chip RAM. Last month's CUCD contained plenty of backdrop pictures and patterns. With an AGA screen you are probably best off with no more than 64 colours on your Workbench, and a fairly small pattern with no more than 32 colours leaving the other colours free for Workbench and other programs.

If you have a graphics card, these limitations no longer apply, so a 268 colour Workbench is entirely practical. Both CyberGraphX and Picasso 98 allow you to run Workbench in even higher depths, with 64,000 or 16 million colour screens possible.

Icons

One serious limitation of the Amiga's icon system is that there is no way of including colour information in an icon. If your palette is different from the icon designer's, the icon will look odd on your Workbench.

The solution is NewIcons, which extends the icon system to allow the icon creator to specify individual colours if an element of the icon is supposed to be dark red, it will be displayed in dark red, or the closest available colour. This is why we use NewIcons on the CU Amiga CDs.

Commodities

Almost since the Amiga was released, programmers have been writing additions and modifications to its operating system. At first

Patches, hacks and kludges

The Amiga has always been a computer the user can customise to their own preferences, so the operating system lets programs alter standard system functions. This "patches" mean that it is possible to alter or upgrade specific functions without having to upgrade the Kickstart chips. Some people consider this behaviour system-unfriendly, but this is exactly what the SetPatch program supplied with Workbench does, and the reason the system was designed to make this possible.

You can have conflicts where more than one program attempts to patch the same function, so it is wise to install Workbench enhancements one at a time. Make sure you have one working just as you want it to before trying another; this also makes it easier to go back to your old setup if you decide to. The different definitions are:

Patch: A program you like that alters the operating system. **Hack:** A program you don't like that alters the operating system. **Kludge:** Something in between.

These used fairly system-unfriendly methods of "hooking" into the operating system, so Commodore introduced commodities.

Now Amiga contains hundreds of Commodore commodities to enhance your Workbench. Running lots of small commodities can be a nightmare when you want to alter the way they work and interact, so programmers came up with the idea of a multi-function commodity: one program to handle a number of different patches and actions. The most comprehensive of these is MCP (Master Control Program), and best of all it's totally free.

All the author asks by way of registration is that you let him know what you are using it as. As MCP incorporates so many different functions, installing and using it is covered in a separate section. You will be able to add as many useful functions to your Amiga that it will be at least a couple of days before you come back to read on from here.

The King of shell enhancements

Although the title is Ultimate Workbench, the shell is an important part of using the Amiga. Many things can be done better in the shell than in Workbench, but it can often be a bit of a pain to use.

Typing in long path and file names, only to find it's failed because of a minor typing error is enough to put anyone off. Isn't it easier to type the first few characters and let the shell complete the name for you, or to be able to drop an icon onto the shell window and have its full name appear at the cursor position?

That's what David Larsson thought, so he wrote KingCON. He also added many other useful features, such as scroll bars and the ability to save the contents of the shell window to a file.

Visual Prefs

VisualPrefs allows you to alter the appearance of just about every system gadget. Its preferences editor shows a sample display, updated in real time, so you can see exactly what each change does. It may not make your Workbench any faster or efficient, but it does make it yours.

Where did I put that file?

A useful feature of other operating systems is a file finder, something the Amiga never had as standard. Finding a file if you don't know its exact name and location can be a laborious process, but aren't computers supposed to save us from all that tedious stuff?

With a name like SimpleFind you would expect this program to be easy to use, and you would be right. You may also expect it to be fairly basic, but it isn't. Not only will it find files anywhere on a hard drive, Zip disk or CD, You then have the options to copy, delete or display any of the found files. You can even unpack archives, or create a new archive of the selected files.

Fast program starting

KingCON gives you much faster access to files from the shell, but it can still take a lot of mouse clicks to start a program buried several sub-directories deep on your hard drive. Workbench gained an extra menu, the Tools menu, from version 2, but it's not particularly user-friendly and putting everything in one menu is very irritating.

Enter ToolsDaemon, which allows you to create as many different menus as will fit on your Workbench screen.

Small, but SO useful

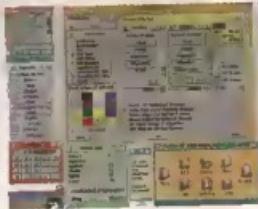
As well as its Finder there is another feature worth "borrowing" from the Mac, the global

NewIcons

NewIcons is a lot more than an icon collection. It completely changes the way Workbench reads icons, giving a flexibility in icon design that is impossible with the standard icon system.

The installer will install the system files and offer to add the new images to your standard system icons. You will have to change the others yourself, using the tools provided with NewIcons. There is also an uninstaller provided. There was a massive collection of icons provided on last month's cover CD. NewIcons is used as the default setup for all the CU Amiga CDs, since the icons look as close to their intended appearance as possible, whatever Workbench palette you use.

► Did you know you can even totally change the way your windows look?



trashcan. Instead of having to look for the trashcan icon in the root directory of the current partition, you have a trashcan icon on the Workbench. GlobalTrash gives you exactly this. Any files dragged onto it are moved to the trashcan of whichever partition they are on, creating the trashcan directory if it doesn't exist. You can set it to show different icon images depending on whether the trashcans are empty or not, and double clicking on the icon gives you options to view this

SimpleFind

SimpleFind is like that wood varnish you see advertised on the TV, it does exactly what it says. It finds files and is simple to use. Type `look` in part of the filename you are looking for and select the directories or drives to search from. Request (or press ALL) and off it goes rummaging through your hard drive before presenting you with a list of files it found.

You can then view, copy, delete or unarchive some or all of the files found. This should be one of the first programs you allocate a hotkey in MCP, so it's immediately available whenever you want it.

KingCON

KingCON adds a wide range of facilities to the standard CON window, as used by the shell and other programs. It has a history buffer, with scroll bars on the window, so you can use read directory listing etc much more easily. You can save the contents of the buffer, you can scroll the shell while it is executing a command and it will open again when it's finished, and you can drop icons onto the window for the full name and path to appear at the cursor position. But the most useful feature is filename completion. Type the first few characters of the file or directory and press tab, KingCON will either complete the name for you, or give you a list of possible matches to choose from.

I asked readers on the CU Amiga internet mailing list for a list of their favourite Workbench enhancements. KingCON featured in just about every reply. Once you've used it you will NEVER go back.

contents of the trashcans and empty one or all of them. You can also use it to eject zip disk or CDs by dropping the disk icon onto the trashcan.

There are two more, very small additions that make a big difference to Workbench. The first is FastExec, which relocates exec.library to the fastest available memory if you have an accelerator card, this may make a significant speedup to some Workbench operations. The other one is a newiconset called PowerWB. This adds a couple of icons to each window's title bar to switch the view modes between View by iconName and Show All/Only icons.

It also adds keyboard shortcuts for these and several other icon operations.

Will that be all?

Adding NewIcons, MCP, KingCON, ToolsDæmon, SimpleFind, PowerWB, GlobalTrash and FastExec to your startup will transform your Workbench into something so much more efficient, faster and easier to use. However it doesn't stop there. Before you start adding all sorts of enhancements to your startup you need to consider the load on your machine. Most of these programs use very little processing power, but each one loads consumes a little more precious memory.

If you have 8MB or less of memory you should think very hard about adding anything more than these. There's no point in

having an attractive and easy to use system if you don't have enough memory left to run programs effectively. For those with some memory to spare, here are some further enhancements.

One of the reasons I or having more memory is to be able to multitask more easily, yet having more than one program running can make you Amiga seem sluggish. Unix computers have long had task schedules, programs that adjust the priorities of other programs to make the best use of available processor power. The Amiga has

Executive

Put simply Executive helps multitasking programs to get on better with each other. You can specify whether a program gets a larger or smaller share of the available processing power.

This is useful for running CPU intensive background tasks, like rendering or image processing, yet still having a responsive Workbench. It comes with a range of programs for monitoring and handling all the tasks running on your machine, but even the basic setup as first installed will make multitasking much smoother. Executive is one of those programs that you quickly take for granted. You don't realise how much it improves things until you stop it.

MCP

MCP, short for Master Control Program, must be the ultimate package deal.

It takes a large number of system patches and enhancements that were available from a variety of other programs and combines them into a single package, adding a few of its own too. Meaning you can control everything from a single preferences program, and patching all the functions from a single program should reduce memory usage too.

Installing MCP is done with the provided installer script and you can then start setting up the various functions. With so many options to experiment with, it can be easy to get carried away, so we have compiled a list of the most useful functions as a starting point. It is important to remember that patching any operating system functions carries a slight risk, especially if two programs try to patch the same function, but the lectures listed here are the safer options.

Some of the other options can cause problems on some machines. So sort out a basic setup and then change things one at a time. That way you will know what works and what doesn't work on your Amiga.

These are the options you really should look at first:

ALERT-HISTORY, ALERT-TIMEOUT And

NOGURU

This replaces the normal "Guru" requester with a more informative one, and writes the messages to a file. It makes it easier to work out what's causing the errors. Since it delays the reset process, it also reduces the chances of a disk becoming invalidated by a Guru reset while writing to the disk.

APPCHANGE

Many programs put AppIcons on the Workbench, and most of them allow you to change the image used for the icon. However some programs hard code the image so you can't change it. This feature will change the AppIcon images for all programs.

ASSIGNPREFS

You can now remove all those Assign statements from your user-startup and merge them all into a single preferences window. Not only does this make it a lot easier to edit anything, it speeds up booting since all the assigns are set with a single command, instead of a separate assign statement for each one.

ASSIGNWEDGE

How often do you get a requester saying "Please insert volume XYZ... in any drive"? Many program installers add assign statements to user-startup, but if you only want to try it out before installing it,

ARQ

ARQ enhances requester in three ways, they open in the centre of the screen, they are much more attractive with an animated image relevant to the type of requester, and they have more keyboard shortcuts. Return of OK, and Esc for Cancel. It's requester has several buttons, they are mapped to the function keys, F1 for the leftmost and so on.

one too. Executive. With Executive you can allocate relative priorities to different tasks to make the best use of your processor. For example, you can set your 3D rendering program to "give way" to everything else.

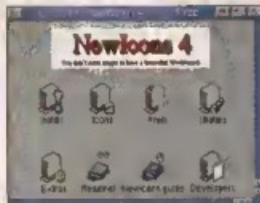
Design your own Workbench

The look of the Workbench windows and gauges hasn't changed for several years. MCP's SysHack function allows some changes, but if you want to customise your Workbench (and other) windows even more, try VisualPrefs. This lets you change most of the standard gadgets on a screen by screen basis, so any program that runs on its own screen can have a different appearance.

MagicMenu does for menus what VisualPrefs and PowerWB do for windows: not only does it change the appearance of your menus but it allows you to alter their

Easy does it

There are a lot of programs listed here, most of them with many options. You may be tempted to try to Install and set them all up at the same time... this is not a good idea. Try each program individually, read the documentation, Install and configure it as the manual says. When you have it working as you like, then move on to installing the next one.



◀ The NewIcons system takes your old Amiga icons and replaces them with bold, vibrant new ones.

behaviour. You can have menus pop up under the mouse whenever you press the right mouse button, instead of having to move the mouse to the top of the screen. You can have sticky menus that stay on screen until you select something from them and you can control menus from the keyboard.

Since we've now changed the appearance of our menus and windows, how about improving the system requesters too? ARQ alters them to open in the centre of the screen instead of the corner; they now have sensible keyboard shortcuts and the appearance is greatly improved.

One of the unique features of the Amiga's intuition is multiple sliding screens. Instead of having all your programs opening their windows on Workbench, each one can have its own screen, making for a much tidier working arrangement. But finding the screen you want when you have several open can

be tiresome. MCP's ScreenMenu feature helps, showing a list of open screens when you click the right mouse button on the screen depth gadget, but flipping screen with the keyboard is no easier.

ScreenTab shows the names of the currently open screens for you to pick the one you want, all from a hotkey. It also gives you a taskbar and StartMenu to launch commonly used programs. Once you've installed all these programs into WBStartup you can experiment with turning them on and off.

There are several programs available for controlling what happens with WBStartup when you reboot, but WBSM is my favourite. Normally nothing happens, but if you hold the left mouse button down during bootup, a window opens with the contents of WBStart so you can disable or enable individual programs ■

Neil Bothwick

this can be a real pain. This function extends the requester with options to create the assign immediately, or to try and mount the required drive.

AUTOMOUNT

If you have devices in your Storage/DOSDrives directory that you only mount when needed, maybe because you only use them rarely, this function is for you. Before the "Please insert volume..." requester can appear, it is automatically mounted.

CACHEFONT

Opening a font requester from any program can be a slow process if you have a large number of fonts available. The system has to scan your FONTS' directory each time. CacheFont builds and saves a list of all your fonts, and passes it to any program that opens the font requester.

COPYMEMOQUICK

A patch to speed up memory usage.

CYCLETOMENU

This one turns standard cycle gadgets into drop down menus, which are much quicker to use when the gadget has a lot of choices, and let you see all the choices at once.

HOTKEYS

Hotkeys are keypress and mousebutton combinations that have the same action wherever you use them, whether in an

application, on Workbench or in a shell.

They provide very fast shortcuts to frequently used functions. The classic uses are to open a shell, or to arrange windows and screens. Double-clicking on any part of a window to bring it to the front when its depth gadget is hidden is much faster than clicking on the depth gadget of all the windows in front of it.

Since you may be spending some time experimenting with the various options in MCP, one of the first hotkeys you should setup is to open MCP's Prefer.

MOUSE-SPEEDER

A mouse accelerator. There is one built into the Workbench Input preferences program, but this one is far more flexible.

NEWEDIT

Adds more control to string gadgets, you can copy and paste via the clipboard and do much more.

PATCHMATH, PATCHOPENWB #1#**PATCHRGB32**

These patch certain system functions to correct errors in the originals.

SCREENMANAGER

A screenmode promoter. This is of most interest to users of graphics cards, and saves running a separate promoter program. However there are uses for all Amigas. Anyone who tried to run the EPU version of DrawStudio Lite direct from this

CUCD will have got an error message due to a configuration file containing a Picasso96 screenmode.

A screenmode-promoter like ScreenManager allows you to force it to use a standard AGA or ECS screenmode.

SCREENSMENU

Turns the screen depth gadget into a menu. Press the right mouse button over it and you will see a list of the available screens. Much quicker than cycling through, hunting for the one you want.

SNAP

Once again, this is a feature made popular by other programs that is now integrated into MCP. Snapping is copying and pasting text from one window into another, via the clipboard.

This is extremely useful with programs that do not have direct clipboard support.

TOOLALIAS

How often have you double-clicked on an icon, only to be told "Could not open your tool xxx"? Programs often create icons for files that use themselves as the default tool, but you don't want to open a full paint package or word processor just to view a picture or text file.

With Toolalias you can replace calls to these programs with something you prefer, such as Multiview or your favourite graphic viewer.

Screen Scene

The anticipation has been getting worse and worse by the month. We've been seeing all sorts of fantastic looking games announced, but releases have been slow. At least it's all starting to happen, and this month we take a look at **Shadow of the Third Moon**, the Voxel flight sim. Does it live up to the hype? Turn to page 48 right now!

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Köln Show

Computer '97 in Köln was more about hardware than games, but the implication for gamers was enormous. We take a look at why...

T

hese days it is considered that an Amiga game is doing pretty well if it sells a few thousand. It comes as something of a surprise to learn that one particular game sold just under 750 copies in the first three days of its release at the Cologne show.

That game was **Shadow of the Third Moon**, a genuinely high end Amiga title. There are a lot of people moving into high specification Amiga games publishing, and the truth is that every single one of them is nervous about it. They all recognise that if the Amiga is going to have a future, people are going to have to upgrade their machines, and a very good way of convincing people to upgrade their machines is to show them how good games would be if they did. This is fairly standard assumption in the PC world, but there is a bit of a difference for the Amiga games houses.

If you pitch a title too high, you lose sales. For a company venturing into a large market like the PC, it can be worth doing because it helps up the average specification of the

machines they are writing for, it makes them look good 'cos they've released a fantastic game, and there are so many people out there that the lost sales from low end users isn't so important. On the other hand Amiga publishers need to maximise their number of sales because the bitter truth is that there aren't nearly so many people buying Amiga games. If someone releases a game that is too high specification, they run the risk of not selling enough to pay for the costs of releasing it, yet alone making the kind of profit on it which is necessary for making a living out of the work put in.

Many publishers will I guess, take heart in the relative success of **Shadow of the Third Moon**. Given that there was never an off the shelf Amiga card that could run this AGA or better, 8MB minimum, 512b RAM CD-ROM and hard drive only game, this is a game only those who've expanded their machines will be capable of running. So why did it sell so many? I think the answer is simple. These specific games are no longer all that high





Genetic Species from Vulcan Software. This stunning looking Amiga title is due out in February of 1988... but won't act at the show.

Active Amiga users seriously interested in gaming are going to have an accelerator, a CD-ROM drive and so on. When users like that see a game designed for an unexpanded A1200, they aren't too likely to get excited, whereas something like TSOTTM which uses the power of their machines to the full comes along things are different. Visitors to the Titan Computer stand could see for themselves what kind of a game was on offer.

Elsewhere at the show there was not a lot by way of new titles. Aurora works of Canada were showing off their high end title H-Bomb, which is an attempt to upgrade classic 80's gameplay with 90's sound and graphics. Fellow Canadians ClickBOOM were hoped to show up with MYST but the game overshot by a couple of days. Vulcan had a showcase of titles at the Amiga stand, showing graphics from forthcoming titles such as HellPig, but could have done a lot better by having, for instance, a fully playable version of Genetic Species on display. New Generation software were there with the demo of Trapped 3 (which they kindly allowed us to put on this month's cover disk!) and were also showing off a PC title they

are hoping to have in an Amiga version of this spring - Wet, an erotic comedy game (?) Titan had the really rather nice looking platform game Sword on display alongside TSOTTM which we have for review next month. They also announced a few other titles expected soon, including Evil's Doom CD, an updated and improved commercial release of the excellent Shareware RPG a spaceopera / strategy game called Last Days of Paradise and a game called Total Combustion PPC, which is a Carmageddon style game for 68040 minimum and PowerPC preferred. As well as all this, old hands such as Isilon / APC9TCP were there.

Perhaps the most important thing as far as gamers were concerned is the news that 3D graphics acceleration is heading towards the Amiga. Micronik debuted their new PCI capable Amigas which could, in theory, use the Voodoo 3DFX cards which the most high end PC games are designed for, and the phase6 PowerUp project has spawned a plug-in graphics card which would give an Amiga more raw game playing power than any current card would possibly need. See page 20 for more on this development.



Starship 2000, from Vixen Computer Systems. Features graphics across with 2D graphics. See next month's 6 Disc review for game.

What's next?

There are some pretty exciting games on their way... but we are tired of telling you about them so we thought we'd just let you have a quick butchers' instead.



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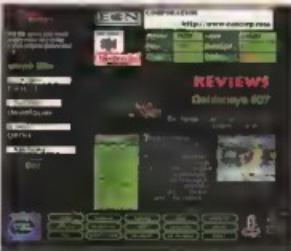


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Ultimate Gloom

■ Price: £14.95 ■ Publisher: Guildhall Leisure © 01302 890000

Gloom's back, and this time it's on CD! Time to rekindle the blood-lust and get yomping down those dark corridors...

Never one to be impressed by an endless list of spells and plot about evil wizards, runes and all that kind of stuff, the all out action approach of Gloom got me instantly hooked. Now the team have been handed over to Gareth Murnin for the third and according to the title, the final instalment in the series.

As is increasingly common these days Ultimate Gloom is a CD-only release. Not only do you get the new Gloom 3 on the disc, but you're also given the original Gloom and Gloom Deluxe too. There's also a bunch of new levels from the general public made with the Gloom editor (which is included also). Quite a package all told then.

It's par for the course that CD games come with flashy intros, normally pre-rendered 3D sequences and a soundtrack. Ultimate Gloom makes a comically bad attempt at setting the scene with a narrated introduction which comes complete with scrolling subtitles and a zombie picture. The voice over sounds like it was recorded in a biscuit tin by a depressed Geordie, then slowed down to half speed to sound scary. Nice try guys.

What's the difference?

If you were hoping for a stream of technical advances since the last edition you'll be disappointed. However, the main game engine is significantly faster with options to play different versions optimised for 320, 630, 640 and 800 CPUs. Specifically the speed increase you'll get is 26% (320), 14% (630), 60% (640) and 3% (800). Unlike Trapped 3 though, you won't be bemused by fancy lighting effects as your plasma bolts hurtle down corridors, and neither will you see any texture-mapped polygon enemies. Why? Merely because speed is an essential require-

ment in any decent shoot 'em up, and at the end of the day that's what Gloom is.

So that's the advances out of the way. Disappointingly most of the other changes are for the worse. The first thing that hits you (after the improved intro screens) is the amateur look of the graphics. The first-level texture maps are very poor. The ground is plain tiled like hell and half of the walls have little more than a coarsely applied colour gradient for detail. This is an unfortunate choice as the scaling of the textures clashes with the thinning as you approach the walls.

Worse still, all the enemies you come across appear to be on casters - they just slide around the place with barely an animation frame between them. If the developers weren't going to bother animating the enemy sprites properly they should have at least given themselves and excuse for it - switching the soldiers for Deleks would have done the trick. Maybe the following levels could have pitted you against mutant arm chairs and angry skateboards. Then again maybe they should have just bothered to animate them properly.

You'll see they've obviously put a lot of work into drawing a highly realistic gun that goes up in front of you throughout the game. Or is it a hotdog? The sound effects are another disappointment. The satisfying splat of exploding zombies is still present but the main gunshot sound has graced a million and one PC games over the years and is surely due for retirement by now.

Gloom on a rope

Despite all of this, it's still Gloom. The opportunity to go shooting off your plasma gun around a whole new set of levels is not to be sniffed at. The two-player mode is still here and it's still just as good fun to double up and play with a mate.

As with Gloom Deluxe, you can choose to run a few different versions of the game to get the best from your system. The display options are 'Gloom 3 Ze Do' (which the documentation warns against using as it will crash - good job they put that in there), 'Gloom 3 Ze' for general use, 'Gloom on e'



screen' which allows you to select any available screen mode (such as a Cybergraphix or Multisync display), 'Gloom in a window' to play in a window on Workbench and 'Gloom iGlasses' which offers a real 3D display if you have some of those 3D glasses Escom were trying to flog a while ago.

I was interested in seeing how it went on a Cybergraphix display with an OES, but the set-up program crashed on the Cybergraphix test machine. Never mind.

The best bit

It's ironic that the best bits of this CD are the two previous Gloom games. They both knock Gloom 3 for six. If you don't have either of them, then this is a good opportunity to get all Gloomed up, especially considering the knock down price. Most of the score here is for those games. Had it been Gloom 3 on its own you'd be looking at something nearer 70%, but the overall package amounts to a decent re-release ■

Tony Morgan

▲ Don't look now, but there's a killer waiting sliding towards you! He must have seen me check new never boots



▲ The title screens are better this time round

ULTIMATE GOOM

■ Workbench version ...	3+
■ Number of disks ...	CD
■ RAM ...	24Mb
■ Hard disk installable ...	Yes

Disappointing third instalment
but the originals still cut it

80

Uropa 2

■ Price: £29.99 ■ Publisher: Vulcan Software © 01705 670269

Vulcan step into the future with this space adventure from Austex. Recent Vulcan releases have not been critically acclaimed - will this game see them back on track?



Uropa2, put in its most basic terms, is a supercharged blend of *Impossible Mission* and *Battlezone*, set

► Right: The polish and professionalism is all there, with nice little sequences and all-in-game graphics (well) are rather less impressive.

against a sci-fi backdrop with a lot of chrome. Vulcan Software's second foray into the world of CD ROM gaming promises an epic of exploration, discovery, adventure, and action. That's a lot to promise and it's no secret that Vulcan's track record has been somewhat spotty. The company has published some very clever titles, but these rarely aspire to be anything more than well, derivative - the likes of *Hilsea Lido* and *Timekeepers*. Some of the company's more recent offerings have met with the ire of reviewers. Along comes Austex Software, developers of *Uropa2* to attempt to rescue Vulcan from this slump.

Rescue it is!

Funny that I mentioned rescue, because that's much of what the game is about. It's the future and mankind has spread beyond the Earth, making the cold moon Europa one of its primary bases. To help with the hard work needed to maintain an interplanetary empire, humans have developed two 'pecies'



of intelligent robots to help do the work: Tekites and Kapones. It seems though, that the Kapones have grown tired of their role as third-class citizens.

They've teamed up with some alien enemies of Earth and have seized control of the *Uropa2* colony. As a Tekite in the special Centurions strike force, you are sent on ten successive missions to break the Kapone stranglehold on *Uropa2* and free the colony. Not to mention showing those aliens that humans and their robot lackeys are not to be misgued with.

The game is played out in two settings. The first is in a 3D isometric world of interconnecting rooms of the colony, ranging from hallways to living quarters to research labs. In most rooms there will be items to interact with - shelves and cabinets to

search (the shades of *Impossible Mission* here, complete with the "searching" wait bar), computer terminals to read clues from, and special items such as lab equipment whose ultimate purpose may be hidden at first. There are also humans - the hostages on *Uropa2* who you are charged with rescuing. They're useless most of the time, move slowly and get in the way. They also tend to walk right in to hostile situations.

That's right, it's not all just an easier egg hunt. The Kapones have their operatives stationed around the base, and they'll shoot you on sight. Trying to defeat them with the measly "laser sword" you start the game with is difficult enough keeping the humans from walking directly into the line of fire is even harder. But, no game of this sort would be complete without some sort of powerup, and true to form you can gather weaponry enhancements and various gadgets to make destroying the enemy easier. There's even the old "weaponry vending machine" concept you might recall from *Alien Breed* and a host of other games - because goodness knows, you want to send your crack commandos into hostile situations lightly armed and on cash.

The bases are equipped with transporters that can zap you between a limited number of locations, but sometimes you have to take the mission on the road. This is the second stage of the game, where you board a "Hovar" craft and set out across the surface of *Uropa*. On the surface you can travel between buildings, pick up yet more powerups and curiosities, and mix it up with



▲ Here we see the 3D sequence in action. The 3D is totally fake, but it is fast and furious and looks quite nice.





Kapone flyboys who send an endless stream of taunts at you as you dogfight at high speeds on the surface. The 3D hover sequence engine is fairly smooth and detailed – you won't mistake it for Frontier any time soon but it does the job.

Of the two, it's the less inspired setting for the game, but it allows for two serial-linked Amigas to play deathmatches, so it can't be all that bad. On the other hand, in later missions it becomes necessary to launch massive strikes against Kapone bases rather than the discreet surgical insertion of your Tekite droid, and nothing is more rewarding than blowing up a polygon beanbag and turning it into lots of little polygons!

Atmosphere on Uropa

Austex and Vulkan have gone through considerable effort fleshing Uropa2 out into a real experience. The 3D intro, while somewhat grainy and not of award-winning calibre, has a voiceover that sets the mood quite nicely. Virtually all of the text you'll encounter in the game is played back on speech, and the mission descriptions are similarly dictated to you. The overlapping distress signal you hear early in the first mission is particularly disturbing – in both the static and the hover views, the game automatically maps your location and where you've been and has information on locations you

haven't yet been to in the hover view.

The game can be played in both ECS and AGA, although the differences are not staggering – you'll notice some extra dithering and a little less chrome in the ECS version. I was surprised because the AGA version didn't seem to lack a lot in color – it is slightly cartoonish, but still effective. The flip side, of course, is that the AGA version could have been so much more spectacular.

Control issues

If you're going to regain control of Uropa2, you're going to need control over your Tekite.

This is a bit of an adventure, if you so chose, you could dive just about all of the game from keyboard or CD32 joyped, although the former lacks something in the response department and the latter gets really confusing, with all sorts of combinations of buttons to press. I found that the easiest compromise was to use the joystick most of the time, the keyboard when necessary, and the mouse for interacting with the various computer screens in the game. This is something less than ideal, however. Note: Although you can use a CD32 joystick, the CD32 is not directly supported. You would need an expanded CD32 with hard drive in order to play, and even then the system requirements suggest a 4X speed CD-ROM drive rather than the CD32's 2X.

The game's inventory system can take a little bit of getting used to. Weaponry and items are categorized separately, and sometimes getting them to work exactly where you want them is a challenge – for example, you can't seem to drop time delay bombs right next to a door you went to blow up, you have to give it a little room, but it took me a few minutes to actually try that out and be comfortable that it would really work.

The documentation for Uropa2 is on the CD-ROM in AmigaGuide format. This is fine although the layout is slightly confusing. I suspect there was a slight omission or error in a couple of parts (at one point, the manual says it is going to describe six items but in fact only lists four), and has no pictures, which would have been nice in order to give a real overview of the GUI, rather than a descriptive overview. But after a little experimentation, you'll get the general idea of Uropa2 mechanics, so you can check the documentation while your gunners are on pause.

► The graphics come in a variety of styles and fares, but show no impressively persuasive Science Fiction feel. Apart from the portfolio at my rate.

The next epic?

With the ability to save games for later play and the progressive nature of the missions (you can't start #2 until you've finished #1) Uropa2 is a game that requires you to make a commitment if you want to see it through.

Working through the puzzles and blasting through the baddies takes some time, and there are 10 missions to play through. The real question for a game that offers this sort of challenge is: is it worth my time? I would have to give a qualified yes. The game revels in pulp science fiction conventions.

Enjoy them. Sometimes the voiceovers go over the top. Laugh with them, not at them. And yes, your Tekite does look rather like a tin can with stubby arms. But that tin can with stubby arms has been charged with a serious misison! ■

Jason Compton

UROPA 2

■ Heatsink version ... 2.0
■ Number of disks ... 1 720
■ RAM 1 MB
■ Hard disk (recommended) ... Yes

Overall

It won't win the Nebula award, but it's fun

88%



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The Shadow of the Third Moon

■ Price: £24.99 ■ Developers: Black Blade / Titan Computer ■ Distributors: Blittersoft 01908 261466

An Amiga game which delivers realistic graphics and traditional gameplay... ? Surely not!



Readers not too whacked out on brandy infested Christmas pudding will recall that TFX, the flight simulator we gave away with our October issue, was originally slated for release back during the Amiga's heyday but was dropped when DID realised that it was never going to run as fast as they wanted on an unaccelerated A1200. Now that a reasonably good accelerator such as a 68030/50MHz is commonplace, TFX offers no problems. Similarly, most games will have the minimum spec machine to run. *The Shadow of the Third Moon* - indeed, on a fast 386 - runs very smoothly.

It's a pity TFX wasn't released way back, because it might have been instrumental in encouraging people into buying accelerators, and the Amiga might have advanced technologically to match the demands of games players. It is perhaps even more of a pity that TSOTTM wasn't released a few years ago because it is damn playable on the kind of hardware which was easily available, if expensive, in the Commodore era. Perhaps if people had seen what an accelerated Amiga was capable of, the Amiga games scene would be a lot healthier than it is now.

I realized that the Amiga was going to lose its dominance as the home computer for gamers when I saw Novologic's *Commander* on the PC. Using a system called VortexSpace, this helicopter sim sported proper 3D landscapes, with hills to hide behind and canyons to fly down. It showed for the first time that more powerful processors would open the gates to entirely new types of game engine, not just the same things running more smoothly. TSOTTM uses 3Dts, Black Blade's own VortexSpace-like system, to generate similar landscapes, but with



▲ *The Shadow of the Third Moon* - fast moving voxel landscapes and fast action blasting.

a smoothness and realism beyond *Commander*. What's more it does this on a machine less powerful than the type you needed for *Commander*. Let's hope that this is an sign that modern specced Amigas can make their way back onto the gaming map.

Rare species

The Shadow of the Third Moon is a member of that odd rare species, the futuristic flight sim. I suspect that this decision may have been made because the game engine's dreamlike landscapes suit Science Fiction well, lending the scenario a great atmosphere. TSOTTM is set during an alien war.

You have the misfortune of serving in the air force during the one of the occasions when your ancient foe, the Keir, turn up at the gate with a rather unacceptably large army. You play through a series of 6 campaigns taking you through various different stages of the war. The first 2 campaigns involve training on the Saxon and the Kryl,

the two aircraft you'll have at your disposal.

The third level takes you to the start of the war. Through the fourth and fifth campaigns, the war rages around you and your side is having a tough time of it. Finally you fight your way through to Quarmia and the large sea and the final battle to retain freedom for your people and the underground city of Salder. With each of the campaigns divided up into between 6 and 10 missions, you'll have to play very hard for war to be over by Christmas.

At the beginning of each mission you get to choose your armaments. You aircraft has provision for a laser, bombs and missiles. Each of these types of weapon comes in a few shades, so selecting the right combination is an important part of the tactics. Choosing between the fast firing low powered laser and the slow firing high powered laser is mostly a matter of taste, but getting the right combination of missiles, with their varying degrees of power, number and accu-

▼ Here's a selection of some of the weapons which you'll use against the alien forces. Lasers, bombs, explosives and rockets aplenty





ency is vital. Once your first mission is underway, you'll very quickly pick up on the fact that this is a flight sim with the emphasis on arcade action rather than simulation. There is none of that taking off and landing jerkiness you've dropped right into the action.

Various control options are available, but using a mouse for steering and firing with a hand on the keyboard for controlling thrust, weapon selection and so on seemed much the most satisfying approach. On the control panel a radar keeps track of the relative positions of your enemies, and a small message window displays information about your mission. A small VDU displays data about your weapons and targeted foes. Get into the melee and you'll soon be battling with enemy aircraft, ground batteries and tanks, while trying to knock out enemy buildings.

A well planned learning curve means that in the easier levels you will find a few well spaced enemies; while in the later levels you can rapidly find yourself in the middle of a hectic battle against multiple enemy aircraft while ground batteries fire the ~~in~~ around you with laser blasts.

The speed of the game engine, even an relatively slow 386, keeps the action going beautifully. You can bank and swoop with great manoeuvrability, and soon you'll find yourself in epic dog-fights. The fact that the landscape wraps around may detract from any sense of realism, but it has the effect of keeping the action quite concentrated, and you are never very far from a fight.

Bit of a bodge?

The graphics for the aircraft are a bit of a bodge, using pre-rendered images, but the bodge is well judged and you don't really notice it in the heat of battle. Clever fog effects give the game not only its glorious parallel cloudy skies, but lovely smoke trails and fire effects which add a lot to the sense of solidity. Badge or not, watching your guided missiles streaking into the distance as



▲ Don't they know smoking is bad for the health?

they track an enemy aircraft is satisfyingly convincing. It doesn't hold up so well at close quarters, however, so the external view mode is rather disappointing, stick to the cockpit. You can use the numeric pad to look around and even zoom in and out with the plus and minus keys, so you still have plenty to see.

The really pleasant thing about *The Shadow of the Third Moon* is that once the initial dustration of the excellent game engine wears off, you've got a very involving and enjoyable game. The structure is well considered, with new challenges being added as the game progresses, and a nice feeling of the sweep of the narrative.

You'll find that it's not just the number and type of enemy that changes, it's also the landscapes. The first campaigns are played out in the green landscapes of home, while the more desperate later levels take you to the grim wastelands of the fogs of Kal Ati, and the final levels takes you to Quansara and the large sea, where the small islands and large open seascapes make for a very different and deadlier environment to fly in.

As the war progresses, you'll even find yourself flying missions as part of a squadron, with a wingman who you can order to distract the enemy fighters while you attack the land installations.

Sounds Good!

TSOTM looks good, but it gives you plenty to hear, too. Pauls buzzes away to himself churning out some pretty decent if not spectacular sound effects, but if your CD-ROM drive is set up for CDDA audio output, you'll get the benefit of a full CD soundtrack to go with the game. The music suits the atmosphere of the game quite well. There are a total of eleven tracks, classic eurosynth composed by The Soundwavers.

Described by one person in the office as "elevator music of the future", it isn't likely to make waves in the music industry, but for in game music it's a big step up from the norm and manages to be quite film soundtrack like, and adds plenty to the game's atmosphere.

Nothing is perfect, and *TSOTM* is no exception. There are niggles with the engine, collisions with the ground are unconvincing, and the view of yourself exploding when you do just work, but these take away more from the game's polish than its playability.

The levels strangely don't and until you hit the F10 key to end the mission, annoying as it can mean that you fly around a while making absolutely sure you're finished before you quit. The slow passage through the (admittedly beautifully rendered) high resolution menu screens can be a hassle too. Set up can be tricky particularly the CDDA support, requiring a bit of basic technical knowledge. On the other hand the range of options is impressive, with CyberGraphX, AGA and general RTG screens supported, a choice of chunky to planar routines, and two sets of object graphics, one for low memory systems and one for those with a bit more RAM to spare.

In game options allow you to trade off speed for rendering quality of the landscape, as well as switching off some of the graphics tricks such as fog effects and tweaking the window size. If the missions are too easy or hard, there are even four difficulty levels to choose from.

The Amiga has traditionally seen games with lots of gameplay but has not until recently seen this kind of realistic graphics. Sadly it has often been the case of late that games which look very nice fail to deliver on that traditional gameplay. I am glad to say that *TSOTM* manages to deliver both. It is said to have sold about 750 copies during the three days of its debut at the Cologne show, and I can heartily recommend you add to that number ■

Andrew Koen

SHADOW OF THE THIRD MOON

■ Workbench version 1.1a
■ Number of disks ...	CD
■ Size ...	1.4Mb boot + 1.9Mb game
■ Installable ...	Yes/no

Rating:

A superb game which looks great too.

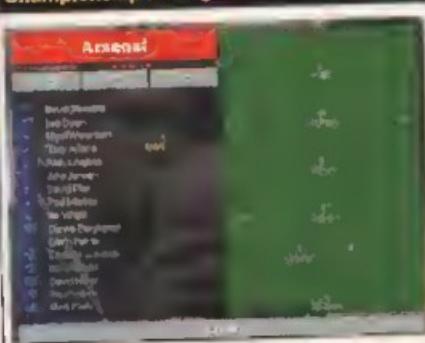
92%

Tips Central



This month's array of glittering Christmas tips should keep you and Auntie Flo busy till well past Boxing Day. Meantime, Mark Forbes and Adventure Guru Sjur Mathisen wish all the CU-Amiga readers a tinsel-tastic Christmas!!!

Championship Manager



Pro Champ Man, Craig Rooney from West Lothian reckons he's magic at playing Championship Manager so let's find out shall we. Firstly the best formation to use is:

- 1 Goalkeeper
- 1 Sweeper
- 2 Central Defenders
- 3 Central Midfielders
- 1 Support Man
- 3 Central Attackers

Leave all the players as normal (not going back or forward). Also left and right sided defenders can play as sweeper, and left and right sided midfielders can play as support as well as central players.

The second cheat is if you own any unhappy players because they are not in the team. Just follow this procedure:

On the main team screen

- Click on GK
- Click on SWP (to the right of all the numbers)
- Click on GK again
- The SWP button should turn from blue to white
- Click on the unhappy player
- The unhappy player should now be GK
- Click on the GK button once again and now the unhappy player should be at number 00 and will believe he is in the team!

Well done Craig! More Championship Manager cheats next month!

Cannon Fodder 1 & 2

Well it's time for some nostalgia once again boys and girls. And a million and one thanks go out to Gurdhill Leisure for releasing the first Cannon Fodder series on CD too.

Tip Number 1: Click on the load icon and press and hold both mouse buttons for 5 seconds and then release. A screen will appear offering you a HARDMAN option and level skip.

Tip Number 2: For both Cannon Fodder 162

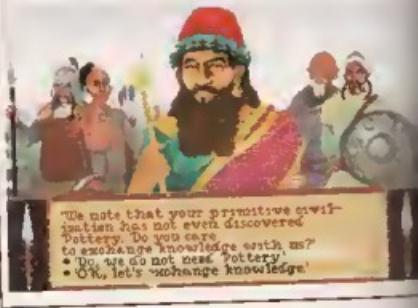
Go access to the save option, and then when the game requests a name, type in JOOLS. Now the cheat mode should be active and flash across the bottom of the screen. Both the ranks and the skills of your men will have increased somewhat.



Civilisation

Try pressing the ALT and R keys at the same time in order to randomize the leaders personalities.

Also on early working versions (try the ECS version for instance rather than the AGA) press the SHIFT key and press 1234567890T so as to give you a complete game world map.



Theme Park

Little Andrew Liscense from Northumberland needs some cheats for Theme Park. Well, it's been a while since I last played this jolly strategy game, so try these for size Andrew.

Enter your nickname as "MIKE" and when you're playing the game, press these keys:

- C - for £100,000
- I - See all the notes you want
- Z - Make all the rides available
- X - Make all the facilities available

Or enter "Flight Sim" for the name of your park and you will start the game with 200,000 instead of the usual 130,000.



Alien Breed 3D

Rusty Denton (now there's a name!) from Southampton can't get past the very first level of the game. Don't worry, Rusty, helps at hand. You need to look for the pole like structures. One of them has a button which you must activate and right at the bottom where you started there is another door which must be opened for you to get your ammo. Just in case you have no idea what the heck I'm yammering about, then try these few level codes:

Level 2 CM0FFIJENPNNPHFFFFF
Level 3 MICOEDDEOPFFFFFFF
Level 4 KPKFOPOHOHFFFFF
Level 5 NLIAMBOOPHHPHFFFN

Mester Axe

A cheat from Epic's master blaster himself, Mr Vince! Press the key "P" to pause the game and enter the following codes:

UUDU =	Master Axe Turbo Mode
RRDDDD =	Power-up Mode
UULLRR =	Blood and Gore Mode
UDLR =	Character Shadows
RULJULL =	Hidden secrets?
DOLLHRVV =	Sprites Scaling
URLR =	Slow Motion Mode



UFO

Mr J Sweeney suggests that there is an easier way to make money without cheating in UFO. For instance if you were to build ten laser pistols at \$8000 each, you can then sell them for \$20000. JS points out that the best things to build are items which don't require special materials, e.g. Alien Alloys, Heavy Lasers etc. Here is a list of some:

	Cost per the Sale Prices	
Fusion Ball Launcher	\$242 000	\$281 100
Plasma Beam	\$226 000	\$287 300
Fusion Ball	\$28 000	\$63 000
Tank/Laser Cannon	\$500 000	\$504 000
Hovertank/Plasma	\$860 000	\$986 000
Hovertank/Launcher	\$800 000	\$1 043 000
HWP Fusion Bomb	\$15 000	\$31 500
Laser Pistol	\$8000	\$0 000
Laser Rifle	\$20 000	\$36 900
Heavy Laser	\$32 000	\$81 000
Motion Scanner	\$34 000	\$45 800
Medi-Kit	\$28 000	\$45 500
Psi-Amp	\$160 000	\$194 700
Heavy Plasma	\$122 000	\$171 600
Heavy Plasma Clip	\$6000	\$9680
Plasma Rifle	\$88 000	\$126 500
Plasma Rifle Clip	\$3000	\$8280
Plasma Pistol	\$56 000	\$84 000
Plasma Pistol Clip	\$2000	\$4440
Blaster Launcher	\$90 000	\$144 000
Blaster Bomb	\$8000	\$17 028
Small Launcher	\$78 080	\$120 000
Stun Bomb	\$7000	\$15 200
Alien Grenade	\$5700	\$14850
Mind Probe	\$262 000	\$304 000
Personal Armour	\$22 000	\$54 000
Power Suit	\$42 000	\$85 000
Flying Suit	\$88 000	\$115 000
Alien Alloys	\$3000	\$8500
UFO Power Source	\$130 000	\$250 000
UFO Navigation	\$150 000	\$80 000

Colonization

Tip Number 1. When beginning a new colony, name it CHARLOTTE. This will allow you to see all maps instantly other European ports check other country's statistics, and gives you \$50000. When you access the other people's European ports you can spend all their money. You can buy anything and spend, spend, spend!

Tip Number 2. Rename your colony to something else and you can start another colony called Charlotte and get another \$50000. You can easily start, then quit, and find you've got \$500000 in the bank waiting for you!

Fears

Vicky Chen of Birmingham has played fears on the CD32 for ages with no joy. I'm not promising anything but... try these extra special level codes with all emmo, all weapons, all 9 lives:

- Level 1 - 607FBBCDF
- Level 2 - 80FBBCDF
- Level 3 - 8C77BBCDF
- Level 4 - 4CF3BBCDF
- Level 5 - BFBFBBCDF

R U beyond help?

If you need help with any game, or if you have any tips you'd like to share with your fellow readers, write to us and mark your envelope Arcade or Adventure accordingly:

Tips Central, CU-Amiga Magazine,
37-39 Millharbour, Isle of Dogs,
London E14 9TZ.

Adventure helpline

**Monkey Island 2**

I've recently started playing Monkey Island 2. I'd be grateful if you could tell me what to do on the boat in part 2. I've loaded the canon with gunpowder and stucked a fuse but I don't know what to do next or how to open the black chest and cupboard in the cabin.

Also in Monkey Island 2, where do I get the scissors to cut the lead the lizard is attached to, in the hotel?

Andrew, Oldham.

Sjur - Snre knows a monkey when he sees one! I don't know what you've picked up on the boat so far, so here's the entire solution for pt 2. Get the feather pen, the ink, and a dusty book somewhere in the captain's cabin. Read the book. Get back on deck and talk to the herdwiking crew.

Then climb the rope ladder to get the Jolly Roger. In the kitchen pick up the pot, and open the cupboard. Take and then open the cereal to find a small key. Go down to the storage-room and open the chest. Inside it you'll find some fine wine. In the same room pick up the coil of rope, and some gunpowder. Back in the captain's cabin, use the small key from the cereal, on the cabinet.

Open the chest inside it to find a recipe and some cinnamon sticks. Read the recipe, and go to the kitchen. Ask yourself what people do in the kitchen, and do it. Yes, that's makes some dinner. Use all the stuff in your inventory with the pot. Everything you don't need will be put into it, but nothing else. You should be able to get the following into it: an ink bottle, note, business card,

feather pen, cereal, piece of paper, Jolly Roger, ink, breath mints, fine wine, 100% cotton T-shirt, T-shirt, rubber chicken, staple remover, smell key, dusty book, cinnamon sticks, and gunpowder. Now use the map with the flaming mess, and the pot as a helmet, and test your skills as a human cannibal!

For your question on Monkey 2, I assume your lizard is an alligator? Let's agree on that, throw away the scissors, and we might get somewhere. What you need is the knife you'll find in the kitchen. Now all you have to do is find the kitchen. Walk through the hallway to the hatch leading to the bar, and you're in! The knife is on the table. Now just cut loose the alligator, and soon you'll have the whole hotel for yourself. Take advantage of it!

Monkey Island 2

I've been playing Monkey Island 2 for ages, and I've got a dead end in terms of ideas. I'm stuck on Part 2. The Four Map Places, on the hard level of the game. I've got two of the map pieces (the one from the antique dealer and the one from Rapp Scallion) but cannot get the other two.

I know I is under the cottage on Phatt Island, but can't win the drinking contest. I know you're meant to empty the grog onto the tree, and fill it with nasal-grog but Captain Kate has got the rest of it.



from the bar on Scabb Island

Also in the cottage, I've used the telescope outside on the monkey statue which sends a beam of light through the open window which reflects off the mirror onto the wall above the trap door, but it has no effect. The telescope falls off the statue before I enter the cottage.

The map piece from Governor Merley's mansion has been stolen by a bird and taken to the big tree on Booty Island, where it's lost in a big pile of other maps which the bird is guarding. I have no idea of how to get the map from the pile. I'd appreciate it very much if you could give me any help as it's a shame to ruin such a great game.

Gareth Armstrong, W Midlands.

You should have a leaflet you got from Captain Kate in your inventory. Use it on the poster on Phatt Isle, and leave the island. When you return Captain Kate has been captured, and is enjoying life in jail. As a former prisoner, you have a key. Use it to free Kate, and pick up the envelope with her belongings, including a bottle of nasal-grog. Now you can win the

drinking-contest by doing what you mentioned. Then stand on the trapdoor, and push the brick in front of you. Onite a nide? Let's try once more. You have opened the window, and used the mirror with the matching flame, so if you place the telescope on the statue, the sun will now burn a hole in the brick. Try pushing it again. Now you're very close to the map piece.

Let's go to the last ones too, shall we? Pick up the dog at the menagerie, and nest it on the pile in the big tree. Remember to leave your pockets open by the way, or the dog won't eat enough air.

Beneath a Steel Sky

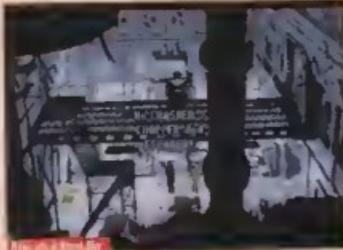
Please help, I'm stuck on Beneath a Steel Sky

Firstly: Do I need the WD40 and the key in the pipe factory, and if so how do I get past the Crusader? And lastly: In the interface, how do I get past the hole without the thing inside it getting me?

Helen, Cardiff

You don't need the WD40 or the key, but I'd use the divine wrath to knock out a crusader. On your second question I can only think of one place with a hole and a hungry monster. You need the lightbulbs from the powerplant control-panel to get past it.

Simply put the bulb in the socket on the left side of the hole, and stand on the left all the time to avoid becoming dinner. Now go right a couple of times and run down the tunnel, if you don't want the ceiling smashing your head that is. But that's enough help from me, so now you're back from me, so now you're



TechScene this month has some really exciting stuff for you to look at - check out our lead review of the PowerPC accelerator from phase5. Plus some superb animation and sound sampling software too, and the fastest A600 in the west...

54 CYBERSTORM PPC

After last month's sneak preview, Matt Buscione gives the \$39.95 phase 5's own PowerPPC card.

51 SOUND PHORE

Could this be the ultimate sound sample editor? This hefty脚本脚本 features many extras making your demanding creativity.

62 PICTURE MANAGER PRO

Net Ketterson reviews this combined thumbnail catalog, processor and image converter.

46 APOLLO 828 CARB

Still have an A600 knocking around? Want to make it faster? This is the card for you. The best specialized A600 card yet.

49 WILDFIRE

Wildfire has been making quite a name for itself on a highly popular animation effects program. Now it's an commercial release, and sporting PPC support. Does it live up to the hype?

70 PERIMETER 2 PREVIEW

We take a look at the Perimeter 2 3D graphics project from 3Dlabs. The heart of the Cyberstorm and BlizzardVisions PPC graphics cards, this chip does things no Amiga graphics card has ever done before.

22 PD SCENE

Steve Byrde has a field day with all three games to play, pointing only briefly to give dose reviews...

76 PD UTILITIES

...then Steve gives his verdict on a trifecta load of useful public domain Software.

78 CD-ROM SCENE

Summer 21, Finalcut and The Games Boxes are put under close scrutiny by Andrew Kara

81 AGI GALLERY

You the authors entries in put us share for all to see and enjoy. Andrew Kara does his art history in caps.

Cyberstorm PPC



PowerPC Amigas are now a reality since the arrival of phase 5's Cyberstorm PPC. Following last month's exclusive first look, here's the full nitty gritty.

■ Price: See Options box

■ Supplier: Power Computing ☎ 01234-851500

The Cyberstorm PPC's entrance to the CU Amiga offices was not what it should have been. It should have been delivered upon a red velvet cushion pandanus petals sprinkled in its path and a choir of 64 noble virgins awaiting the Arrival. Instead the usual harry old posty dumped it in reception. What the Royal Mail lack in a sense of occasion was adequately balanced by our enthusiasm to check out phase 5's first installment in the PowerUp masterplan.

In case you've not been paying much attention to the Amiga world of late, here's why this board is creating so much excitement. When the Amiga was first specified back in the early 80's, the designers chose to use a central processing unit from Motorola called the 68000, a very advanced and excellently designed chip. Motorola developed this chip in increasingly more powerful models such as the 68020 used in the A1200, the 68030, 640 and the 68060 which is the fastest CPU for the Amiga. Then Motorola stopped and moved over to their new generation of RISC processor, the PowerPC. RISC chips use an instruction set which is more optimised than traditional CISC processors such as the 680x0 series and the Intel processors used in the PC. They are able to execute

commands using less clock cycles, and therefore fundamentally faster. The Apple Macintosh, which like the Amiga started on a 68000, moved to PowerPC a few years ago, while the ownerless Amiga has been left clinging to a series of CPUs which are increasingly looking like yesterday's technology. Phase 5 have decided to change all that with a range of accelerator cards which use the PowerPC chips as a multiprocessor, sharing memory access with a fast 680x0 chip to retain full compatibility.

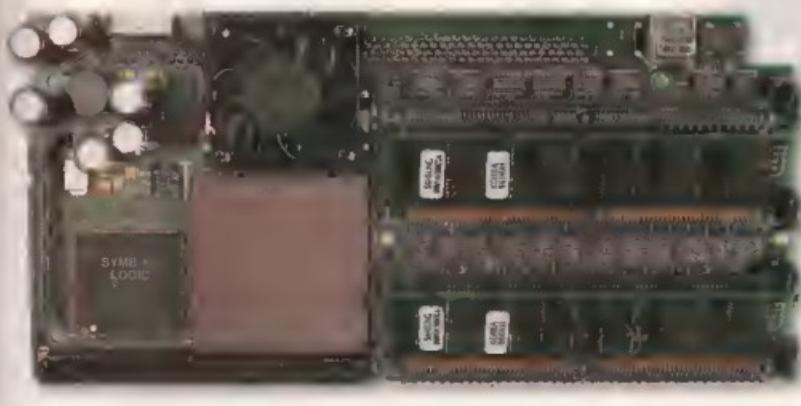
The CS-PPC itself is a so-called fast slot[®] accelerator as it will fit all Amigas equipped with one such as the A3000 and A4000 desktop and tower versions. However, A3000s require a hardware modification because of a lacking INT line. Instructions on the hack required can be found at <http://www.vgr.com/int2> and in the web section of our CD.

The most noticeable thing about the card physically is the bracing of large capacitors in one corner. These form part of the power supply circuit which is necessary because of the voltages that the 68060 and PowerPC require. It doesn't take a rocket scientist to figure out that the hardware is an engineering masterpiece. Every square centimetre of PCB has a component on it. There's a bank

POWERUP[®]

AMIGA™ GOES POWERPC™

▲ The Cyberstorm PowerPC is the first part of the phase 5 PowerUp project. Shortly to come are the BlizzardPPC and the CyberstormPPC and BlizzardVisionsPPC graphics cards, then multipeccessor cards and finally, the Akkis



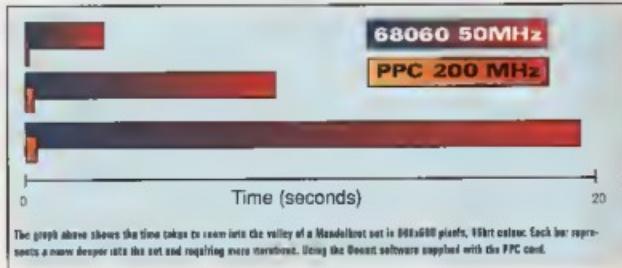
of 4 SIMM sockets, a SCSI Ultra-Wide connector and another large connector for the forthcoming CyberVision PPC (see page 70). The 68060 sits next to the Symbios Logic 53C770 SCSI controller and dwarfs the much smaller PowerPC 604e itself. There is a small quiet fan and heatsink on the PPC providing but it seems to run extremely cool anyway.

The CS-PPC operates a true 64-bit memory architecture which means that SIMMs need to be populated in pairs of the same size. 60 or 70ns SIMMs can be used but with the faster units, the memory timing can be sped up with a small tool which increased the PPC Memread benchmark from 156Mbps to 185Mbps. Wow!

Ultra SCSI

The built-in fast DMA SCSI Ultra Wide interface is just as new to the Amiga as the PowerPC CPU. Unfortunately using it requires the addition of some moderately expensive cables and active terminators.

There's so little space on the board that there's not even a SCSI terminator so in the most basic configuration one would need a SCSI-UW hard drive, a cable to the drive and an active terminator on the other end. None of that will come cheap. To get the most from this already expensive card, quite a bit



The graph above shows the time taken to zoom into the valley of a Mandelbrot set in 640x640 pixels, 15bit colour. Each bar represents a move deeper into the set and requiring more iterations. Using the Beoast software supplied with the PPC card.

more money is going to have to be spent on the SCSI side. It is also possible to get adaptors to standard SCSI-II so existing devices can be used. However the Amiga dealers seem slow off the mark in stocking the required cables and adaptors.

Inclusion of the fastest possible SCSI interface clearly identifies the CS-PPC as a no-compromise high-end performance card, but with a high end price too. Cheaper A1200 PPC accelerators are to come, big-box Amiga users may have no choice but to wait until the CS-PPC price comes down.

Support software

In the CS-PPC box is a CD-ROM and two floppy disks. One floppy disk contains the drivers and prep utilities for the SCSI interface. The other contains the ppc library necessary to use the card. For some reason, phase 5 neglected to include an installer that copies the ppc library or even a readme to detail this. In fact the entire PPC-CD-Update drawer doesn't have an icon.

Sadly this is a recurring theme with the Phase 5 CD-ROM also which is very poorly organised. The phase 5 PPC demos and developer ADE environment can be found in the PPCRelease drawer while a couple of third party PPC demos can be found in the Contab drawer. This CD shows signs of being a bit of a rush job, no doubt a product of phase 5's desire to get the boards out to an impatient public as quickly as possible.

Updates and patches are already appearing, and there is likely to be a much better polished CD pretty soon now, but in the current form, getting everything up and running is a bit of a struggle. Originally there were plans to release this with a version of the CyberGraphX retargettable graphics system

A Everyone wants to know the answer to one simple question: How fast? Until comprehensive software benchmarks such as AIDA are available for PPC, any benchmarks are going to be pretty dubious. Here we show the advantage of PPC for real world applications, fractal rendering

Cyberstorm PPC options

Cyberstorm PPC	150MHz	604e	no 680x9 CPU	£499.95
Cyberstorm PPC	150MHz	604e	68040 40MHz	£549.95
Cyberstorm PPC	150MHz	604e	68060 50MHz	£699.95
Cyberstorm PPC	180MHz	604e	no 680x9 CPU	£579.95
Cyberstorm PPC	180MHz	604e	68040 40MHz	£699.95
Cyberstorm PPC	180MHz	604e	68060 50MHz	£799.95
Cyberstorm PPC	200MHz	604e	no 680x9 CPU	£679.95
Cyberstorm PPC	200MHz	604e	68040 40MHz	£719.95
Cyberstorm PPC	200MHz	604e	68060 50MHz	£879.95

The big chip in the middle is the 68080 - the PowerPC chip is hidden under the fan. At the top and in the SCSI 3 connector, and the odd slot at the bottom is the graphics card slot.



which could send CybergraphX data to AGA screens, but she has not yet materialised.

Most of the demos require CybergraphX, however, so AGA users are going to feel rather left out.

The selection of software on the CD is quite varied and mostly best used to demonstrate the board's power and little else, but there are a few very useful exceptions, such as LWView, a lightning fast Lightwave object display, XPK compression routines in PPC, and some Mpeg software. Benoit is a respectable Mandelbrot fractal explorer. This has a flop gadget between 68K and PPC code and correspondingly has a major impact on rendering time.

The MemTest program performs a memory benchmark on the PPC and 68K CPU. Oddly the program to switch the CS-PPC to the faster 60MHz RAM timing is not present on the CD-ROM or floppies, you can find it in the magazine directory of the CD.

Its PPC could be a highly useful program. This is an MPEG video player which requires a Cybergraphics 16 or 24-bit screen. It locked up running on our machine until a later ppc library was obtained from phase 5. Even then it was highly unstable.

As of going to press this was still being worked on. We did get it to run a couple of times and it delivered highly acceptable mpeg video playable. PPCMpegPlayer plays MPEG audio including layer 3. It does so via the Ami MPEG audio system, so taking advantage of a variety of superb sounding 14-bit Paula modules as well as virtually any third-party 16-bit audio card going. It sounded great and used virtually no 68K CPU time.

In fact, we calculated that it was using only 18% of the 200MHz 604e too. If you have a good collection of MPEG audio, then this will be extremely handy indeed.

The bright future

The developers support for PowerUp is militarily quite dire. There's no proper Amiga native compiler which can generate PowerPC code. However, Wolf Dorch of phase 5 informed us that the Amiga's best compiler SAS C, would be upgraded to PowerPC support. This is super news for one and all, while SAS no-longer officially supports SAS C on the Amiga, the package is in full development by its coro author phase 5 also hinted that they may make SAS C PPC available to dealers, currently it's not sold in Europe and this would make a high quality PPC development system widely available. The Cyber-

storm PPC is expensive, however it has the highest specification ever seen on the Amiga platform, the fastest 68080, the fastest SCSI and, the ultimate in computing power, the 200MHz 604e. Software releases are trickling in and programs like Wildfire PPC, and so on will rapidly make this a must have product for anyone using an Amiga for professional graphics. It's totally dependent on software appearing to take advantage of it, but software developers have greeted this arrival with a lot of enthusiasm - rumour has it we'll even see Lightwave resuscitating on the Amiga in PPC form.

Prices will fall and low end products will be introduced for the A1200 in the first Quarter of 1996. The CS-PPC proves phase 5 can do it but that there's further work to do on the software support front. Having shipped 1800 of these units so far, the future looks bright for PowerPC on the Amiga ■

Met Bettinson

CYBERSTORM PPC

Developer: phase 5

System Requirements: An Amiga with the 'hot slot' (IDE) and a monitor.

1.4 - 2.1
Amiga CD-ROM and Instapower processor hot slot adapter.
You have no jumpers in 1601 or 1611.

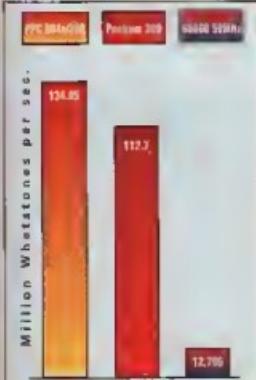
To move a processor to the board who's not impressed?
PERIODIC & CAPITAL.

1601 & 1611
CyberStorm expansion. This may place big-bus Amiga cards out of the PowerUp program.

OVERALL

Too pricey, but for the power
over this is simply a must have.

90%



▲ Andreas Heineken's port of the Whetstone benchmark to PPC makes preliminary speed comparisons possible, and here are the results

Sound Probe



■ Price: £24.95 ■ Supplier: HiSoft ☎ 0500 223 660 <http://www.hisoft.co.uk>

An all-in-one sampling and editing solution for everything from low to high end audio sound too good to be true, but could it be?

► Try the Timetrack feature for long 'n' lazy vocal cuts that crop up in almost every dance track these days.

Asides from SoundStudio Amiga audio software development seemed to come to a grinding halt about three years ago. To be fair, most developers had probably had enough of trying to squeeze professional quality audio out of Paula, the Amiga's old four channel 8-bit sound chip.

Commodore had been promising audio improvements for years, and when audio was overlooked with the release of the A1200, new rumours sprang up about an official Commodore Amiga DSP add-on. It never turned up, but since then the 8-bit limits of Paula have become less of an obstacle.

The likes of SoundStudio and its 'direct to disk' song recording features, when combined with the falling price of CD-R writers, have made it possible to bang out 16-bit digital masters on an A1200, while sound cards such as Delfina and Toccata offer basic but high quality 16-bit digital stereo input and output for Zorro-equipped Amigas.

It's about time some new software was released to take advantage of all of these advances and more – to take it to the next



stage. That's what Sound Probe hopes to do.

A new approach

The bulk of sampling software the Amiga has been subjected to in the past has probably been a bit 'off the wall' to put it politely – buggy, hucky and without a screenshot requester between them. That's fine if you never knew your Amiga could multitask, only ever used it with a TV and never wanted to do anything else but use that one program.

These days most of us expect a bit more

Sound Probe is a proper Amiga application with familiar looking windows, pull down menus, a screenshot selector and more configuration options than you'll ever need.

It's also been designed as a modular system so as to fit in and adapt to as many different Amiga set-ups as possible. There's support for 16-bit sound cards via the shareware retargetable audio system AHL and direct support for HiSoft's own Aura and Clarity samplers. It prefers to work in Fast RAM and can even handle enormous hard

Just for effect

Any sampler editor can cut and paste chunks of data. What separates the men from the boys is the range and power of the sound processing tools on offer. Sound Probe really goes to town when it comes to special effects with a modulus system that allows new ones to be added in future. Top billing goes to the Timetrack feature, while there's a healthy selection of others to filter, phaser, polish and distort your sounds with. Here's the complete list (so far...).

Area Echo

Band Pass Boostar

Band Pass AV

Band Reject AV

Bass Boost

Blu:

Brightan

Change Pitch/Timetrack

Chorus

Clap

Clean Start-End

Clip Distort

Compressor

Crossfader

DC Adjust

De-crackla

Daley

Da-noise

Drstort

Dither noise

Echo

Fast Reverb

Flange

High Pass Booster

High Pass AV

Low Pass Booster

Low Pass AV

Matalic

Modulata

Modulation Echo

Muffla Echo

Noise

Noise Gate

Normalisa

Phaser

Phase Swap

Pitch Band

Resampla

Resonance

Reverb

Revars Echo

Scale Pitch

Scratch

Shadow

Smooth

Stereo Echo

Treble Boost

Tremolo

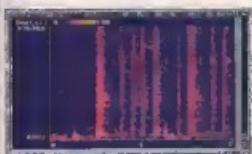
Tube

Volume

Wah wah

Amaze and amuse your friends...

Most samplers give you a standard two-dimensional graph of the waveform. Combined with good zoom tools to get you right in on precise areas, this is sufficient for most editing requirements. However, Sound Probe also offers an alternative 2D view and a couple of 3D graphs.



2D frequency graph

With frequency represented on the vertical axis and time on the horizontal, a range of shades is used to indicate the volume (amplitude) of the various frequencies. This isn't particularly useful in day-to-day editing but it looks quite cool and scientific.



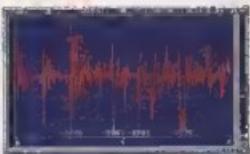
3D FFT surface graph

This one shows the amounts of different frequencies in a file that works well as an instant visual reference. The peaks and troughs represent amplitude levels, the horizontal axis in time, and the frequencies are plotted on the Z axis in multi-colours.



3D frequency graph

Very similar to the other 3D graph, this is also based on the FFT (Fast Fourier Transformation technique). In future versions of Sound Probe we may even this extended to include visual filtering of specific frequency bands. Here's hoping...



Standard 2D waveform

It's fast to use than the others and generally it's all you want. The peaks are enough to indicate where certain parts of your sample begin and end, so it's handy to have this quicker, simpler display when you want to zip around with a low mouse click.



Working from hard drive rather than RAM is slower but it opens up lots of exciting possibilities, such as recording and editing entire 16-bit stereo songs.

Taking a lead from the previous 'king of the beats' AudioMaster, Sound Probe lets you create a long sequence from a short sample with the help of multiple loops. This is of limited use but will no doubt come in handy for some. One possible use is for soundtracking a video production using a few bars of backing music; it's easily done and requires no musical skills apart from the ability to set a few loop markers at appropriate points.

Effects processing

Computer-based sample editors come into their own when you reach the topic of effects processing, and this is one of Sound Probe's strongest features.

Even with the falling cost of studio equipment, it would cost an arm and a leg to assemble a collection of hardware effects processors to perform the range of functions on offer from Sound Probe.

▲ Here's just *one* of the many Settings menus, which together allow you to alter and customise almost everything about the program.

◀ How would you like your samples displayed Sir? FFT 2D frequency graph, sexy solo ep?

drive projects for editing entire songs.

It's odds on that whatever your current sampling software does, Sound Probe does too. It's also likely it will do whatever it is you wished your current package did plus a whole lot more.

Where to start?

The trouble a poor old software reviewer has when faced with something like this is where to start. Sound Probe doesn't dictate any working methods and isn't limited to any one application. To give you an idea of what you might choose to do with it, let's take a walk through some possibilities.

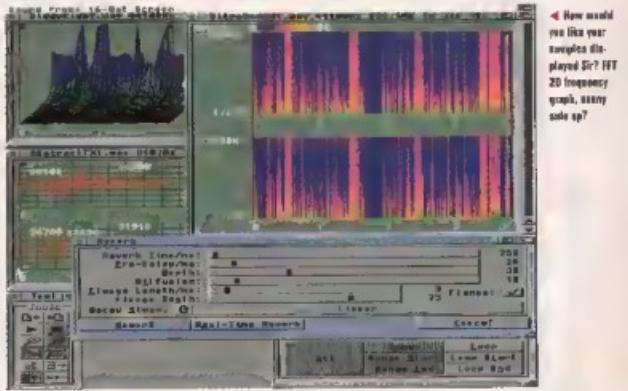
Whatever you're doing, you'll need to get yourself a sound sample to work on. There are two ways of going about this: either load one from disk or create one by making a new recording. Recording a new sample requires you to select your input device from a choice of eight: AHI, Aura, Aura B, Clarity 16, Generic Parallel, Generic PCMICA, Megaloudsound or Megasound Fast.

In theory the AHI option will allow you to sample from any sound card that has an AHI driver - although it refused to work for me with a Tascam card (although AHI output through Tascam worked fine).

Now that you've got your sample you can

do all kinds of things with it.

First of all you can look at it in one of four main view modes, ranging from fast and functional to fancy and colourful! If you've got a particularly large sample you could have recorded it direct to your hard drive

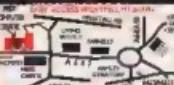


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Amiga

Amiga Basic v6.3

Cartoon v3

Checkers Open 1.0 Unigraf

Colorama 1.0 Unigraf

Cool Chat 1.0 Unigraf

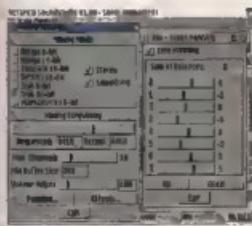
D-View 1.0 Unigraf

DR-View 1.0 Unigraf

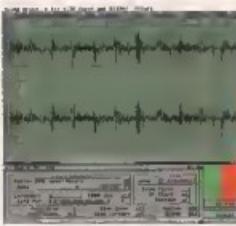
Driventry Optus 4.12

Four steps to heaven

Watch this: we will now demonstrate how you can create a professional quality stereo 16-bit audio CD, complete with all the studio effects you could wish for, with nothing more than one Amiga 1200, a Squirrel CD-R kit, OctaMED SoundStudio and Sound Probe.



- Using high quality 16 bit samples (as on this much a CD) compare your music with SoundProbe thus record to hard drive at 44100Hz stereo (with a watermark).



- Open the digital audio file in Sound Probe and apply as many effects as you require to chosen sections of the song. Edits can also be made to extend or cut off specific parts.



- Convert the project to CDA (CD digital audio) and burn it to a blank CD-R disc with MakeCD or your preferred CD burning software, along with any other tracks you have.



- Boast by lifting up your hi-fi system, open up the CD tray, pop in your brand new gold disc, turn the volume right up to maximum, and then you can sit back and bask in the glory of your perfect production.

So what was it that said you need a DAT recorder then?

Anybody into making dance music will surely have desired a timestretch capability (in which the length of a sample is changed without its original pitch being altered) if only to be able to perform the latest in-vogue effect. Amazingly Audiomaster IV was the only Amiga sample editor that could do this until Sound Probe, five years later.

Here the idea is taken a little further, with the option of combining timestretching with pitch bending, so you can gradually slow down or speed up a sample and retain its pitch, or do the opposite and slide the pitch whilst retaining the original length. As with all the effects, you can adjust any of the main parameters that control the final sound via sliders.

Generally the effects have been designed foremost to be used on samples in memory,

but many can also be used in real-time to process a signal via your chosen sampler.

The reverb is one of the best you'll hear from an Amiga sampler. This is one effect that has proven very difficult to pull off convincingly, and while you might have to experiment with some of the settings, you should find it satisfactory for adding fairly realistic ambience to most sounds.

Even though there are more effects on offer than in any rival package, you can never have too many. With that in mind it's good to note that Sound Probe has been designed to be able to accept new 'modules' as and when they become available. This also opens the door to any enterprising programmers to come up with their own.

An official support web site should be up and running by the time you read this which

will act as a centre for any such updates or add-ons.

(www.york.ac.uk/~dja100/sprobe.htm).

Stability factors

I wouldn't be fair to reach the end of this review without mentioning the sticky subject of stability. During extensive testing of Sound Probe I suffered quite a few crashes and stumbled across a few bugs.

Fortunately I was in the position of being able to email the author who was able to diagnose the problems, advise me where necessary and fix some bugs. The specific bugs I came across needn't worry you, as they've been fixed for the release version, but it does suggest there may be others that will be uncovered as people use the software in different ways on different set-ups.

One of Sound Probe's best features is its ability to work on large samples from hard drive. However, in order to do this the file you're working on must be kept 'open'. If for any reason the software crashes while the file is open the drive partition on which it's stored will be invalidated. That means you'll then have to line up the partition with Quarterback Tools or a similar utility, which is a high price to pay for a system crash.

This shouldn't be a major problem now it's had a bug fix, but it is worth knowing.

Conclusion

Aside from stability problems (which seem to have been solved) it's hard to fault Sound Probe. It is hard to find your way around at first, partly due to lack of structure in the realms of menus and options, but due mostly to the sheer size and flexibility of the system.

Fortunately the manual is excellent, going into each section of the program in some detail. The modular design means it can only get better in future. It's already way ahead of anything else that's out there, and with any luck we'll see more bits and pieces added from third parties.

Don't forget there's a demo of it on this month's cover CD-ROM. Check the documentation for the limitations and give it a go. I don't think you'll be disappointed. ■

Tony Horgan

SOUND PROBE

Developer: HiSoft

System Requirements:

Amiga 1200 or higher, Workstation 2, 4Mb RAM, hard drive

PROS:
Pretty good although it can get a bit wavy at times due to the sheer amount of options and modules on offer.

CONS:
Convincing reverb with an enormous range of uses, although stability comes into question.

VERDICT:
It doesn't come cheap, but then, especially for such a program, it's a reasonable investment.

OVERALL:
The best sampling and editing software by a mile

90%

Picture Manager Professional

■ Price: £39.95 ■ Supplier: Blittersoft © 01908-2614661 <http://www.blittersoft.com>

Are you tired of loading countless images to try and find the one that you're after?

Picture Manager Pro claims to be able to help.

Since the Amiga is very involved in rendering and image processing, it stands to reason that many will amass a large collection of images. Finding the right images and converting them into other formats can be a complete pain. Picture Manager Pro comes to the rescue in a combined thumbnail picture catalog, image conversion and processing package.

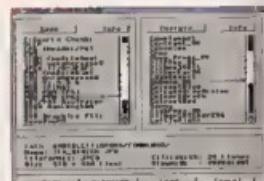
On first installing the package, I faced instant crashes. Digging deep in the documentation revealed that it's not possible to have the CGraphX and Picasso 96 RTG libraries installed at the same time. PM Pro will run on any screen either native or RTG driven. The GUI itself has two modes, a windowed mode where the button bar and navigation buttons are in a small window and the picture thumbnails are in another, or a full screen mode where the buttons are fixed to the top of the screen and thumbnails

fill up the rest of the entire screen.

Poor icons

The buttons themselves are very poor three colour icons which are difficult to tell on their functions. There's no context sensitive or bubble help either. Given the package is designed to run on high colour screens, I would have thought a few pens could be spared for better icons. The menu options and GUI also somewhat diverge from expected behavior to reinvent the wheel again.

Whilst that's a pet hate of mine with Amiga applications, it didn't take long to figure out where things were. Selecting new catalog, a GUI appears asking for the catalog type which contains a gadget to set the size of the thumbnails and whether they are monochrome or colour. There's 3 thumbprint choices, 80x64, 120x96 and 144x12. For some reason the catalog name and description are converted to upper case elsewhere.



▲ Some basic image processing options are provided
in the Sayer View library system

▼ Thumbs up:
images give a
good impression
of the contents
of your image
directories.



There seems little point in that. To add pictures to the newly created catalog, one chooses the strangely named "expand" submenu. In here we can select individual files, directores and directores with complete recursion to inner directores.

Sounds good in theory but I can't help thinking the programmer didn't understand how file requestors work. There is no way, for example, to select some files in a directory and them some directores as well. The first thing I wanted to do, in fact, A workaround would be to add those files and then go back and add directores. Errm no you can't multiselect directores and if you try to add more files, PM Pro complains that the "logfile" still exists and would you like to overwnte it! Now that's just plain silly.

Move along now...

So, you need to move your images around so that everything you want to catalog is in one directory. Surely you shouldn't have to move your files to suite the cataloging program. After the stage of selecting files, a summary of the image types is displayed.

Rather than list all the supported file formats, it will suffice to say that PM Pro impressively supports every file format I ever heard of and them some. The package will even interface with an installed Ghost Script set up to support EPS. Ghost Script is not the easiest of packages to use though, I would have liked to have seen EPS built in so clip art could be worked on in much the same way. Then we press expand again and PM Pro closes the screen, strange. A GUI on the Workbench shows the status as: every

picture is loaded and a thumbnail created.

Clearly with a lot of pictures that can take a very long time, depending on CPU power or the Amiga's concern. Why didn't PM Pro just leave the screen open and leave the status window on that? Who knows. The progress bars in lengthy operations tend to stop at random positions for some time rather than be a good indication of progress.

Impressive thumbnails

My `grabs` directory took about 2 hours to completely scan. After which the screen was covered with all the thumbnails.

One could quickly move between pages of thumbnails and the image quality was appropriately impressive. As part of the reinvented GUI system, short and long clicks on the thumbnails can be configured for different actions. One of which may be a pop up menu system which allows for selecting of, view, remove, delete, merge, process, convert, information print and launching of PPaint or DPaint IV. The latter seem to be hard coded into the software although you select the paths to them. Once the images are in the catalog, they can be sorted by a variety of methods including name, description or usefully, the creation date. It's also possible to get ASCII lists of the images in the catalog of varying degrees of verbosity.

The whole set comes without a manual and all documentation is in AmigaGuide form. This is accessed from the main GUI via a menu with a long list of entries for each section of the package. Context sensitive help or help bubbles would have been better. Scanning direct from the Scanpix package Scanique 3 device is supported. Printing directly via Turbo Print is also supported. Each picture can be individually printed or the entire catalog can be. However, there's no control at all on the printable image sizes, borders and captions. The upper case descriptions plague print-outs as well.

The processing menu has a range of operators including some useful dithering options, the usual blur/sharpen convolves and colour alterations/correction functions. There's a complete lack of an undo button though; one has to close the window and



start again to go back to the original image. The image processors are those which come with the Superview image library system. Superview is bundled with PM Pro and installed in the same step.

Slide to it

PM Pro will also create slideshow anims and contains healthy RAR support along with useful scripts for browsing inside LHA/LZX archives and so on. Ultimately, it's a good picture management system. Support for scanning and printing via the leading commercial packages is great. It supports converting most image types to another and displays well on the leading RTG graphics systems as well as the Amiga's native display.

Support for Photo CDs is also included, the thumbnail previews of the PhotoCDs are displayed but the pictures accessed are the full high-resolution versions. When restarting PM Pro, the lastest catalog is automatically

loaded – good for restarting a project. User menus can be configured, then set to appear over images with short/long click qualifiers. That's useful for sending the image to an application of your choice or by performing a step of operations. Those that are provided, result in windows covered in yet more of the nasty icons for use with your own functions.

PM Pro worked well at scanning my hard drive and getting a good indication of what pictures are where and for quickly converting them to other formats. It's not without flaws though, certainly I'd like the interface spruced up and the serious limitations of adding images to the catalogs to be addressed. More flexibility to printing formats would also be desirable.

With ample room for improvement PM Pro is still a solid product – highly useful if you work with a lot of images. The bottom line is try the demo on the cover CD first. ■

Met Betschen

A must have
mode, da
thumbnails and
overviews bet-
ters are not
available instead of
being fixed.

PICTURE MANAGER PRO	
Developer: J. Schade:	
System Requirements	
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PICTURE MANAGER PRO Developer: J. Schade: System Requirements Harddisk 2 or higher, hard drives and 2MB space RAM. <img alt="Screenshot of the Picture Manager Pro interface showing a catalog of images. The top menu bar includes 'File', 'Edit', 'View', 'Mark', 'Remove', 'Delete', 'Rename', 'Cancel', and 'Hide Thumbnails	

Apollo 630

■ Price: £99.95 ■ Supplier: Eycotech Group Ltd. 0121 453 7130

This new accelerator for the A600 sports a 68030 running at 33MHz with a full MMU, an FPU and a SIMM slot for the addition of up to 32Mb of RAM.

► A neat, well put together board which actually stays in place. What more could you want?

The A800 was a machine that was never meant to be expanded very much, and thus there is no provision on the motherboard for an accelerator. The A500 had an expansion bus which allowed accelerator connection. More recent models have a specific accelerator slot. There are other ways to skin a cat, however, as the Viper520 last month showed.

The A600 had a Motorola 68000 CPU in a standard DIL socket. Installing the A520 involves pulling the chip out of the socket and slotting the pins on the bottom of the accelerator into it, replacing pin for pin the functioning of the 68000 with the much faster board. Even this technique is out with the A600, which used a much smaller surface mounted version of the 68000. The only way anyone has found to slot into the motherboard is to clip a PLCC socket, inverted, over the 68000 chip. The socket is connected to the board with the new CPU on it.

Throw a Wobbly

The problem with this approach is that you end up balancing a circuit board on a small socket jammed onto a slim-line chip. Users of the old Apollo 620 found this to be a major problem, with the board frequently overbalancing and slipping off the chip.

The Viper clipped on more efficiently and was shaped to better lodge onto the board, but it was still not perfect. EyeTech have employed their famous velcro to make sure the card suffers none of these problems. A few stockdown pads and stand off spacers

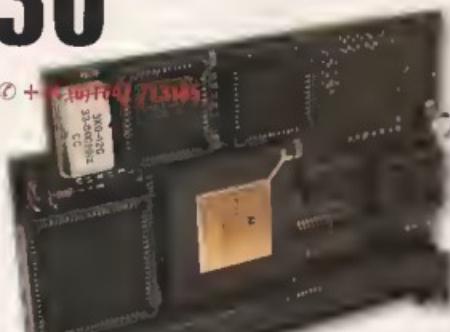
give this board the extra support pillars it needs. A small capacitor right next to the CPU requires a corner of the socket to be shaved and in installing I found it necessary to shave a little bit more, but this is an easy task with a sharp knife. It is a fairly ugly solution to look at, but once you've closed the box, the only thing you'll notice about Eyetech's solution is that it works. While you are not advised to turn your AGOO upside down and shake it about, there is no doubt that this card offers a lot more physical stability than the others.

The 68030 on the board we were sent had the advised clock speed scratched off, which makes you wonder, but in operation there were no problems at all. Functionally this is very like a standard A1200 accelerator card. It goes fast, a good few times faster than an unaccelerated A600 anyway, if not up to the level of the average expanded A1200. The FPU maths co-processor means that rendering and fractal software, for instance, will speed up very significantly.

In a real advantage over its rival the Viper 630, it bears a SIMM socket. SIMMs are very cheap right now - it would cost you only around £60 to buy yourself the 32Mb maximum this board can take. In comparison the Viper's memory cannot be expanded: they are sold with either 2 or 8 Mb fixed.

For You?

The big question is whether it is worth paying out a hundred quid for your A600. For that kind of money an A1200 can be bought second hand and a comparable accelerator for that would set you back another £80 new. Certainly just getting yourself the Apollo 830 would be cheaper but the other option gets you a new computer with AGA and a lot



more expansion potential. If you are thinking that you don't want to bother buying a new computer until a new model of Amiga is released, but need some more power, then this becomes a tempting choice. If you keep your A600 because it is small, and you only need to run your word processor faster when you have a few fonts on the screen, then again it is tempting, but for many it would make more sense to keep the cash and upgrade later. Assuming you have decided you want to spend some cash on sprucing up your A600, the choice becomes something more straightforward.

The Apollo A630 and the Viper 630 have little to choose between them on price the choice comes down to the hardware. If you want that little extra speed the Viper is the faster car. If the ability to expand beyond 810B and the security of a more physically stable card is important, this card is for you. It will make your machine fly compared to an unexpected A600 - Suzanne the Amiga 1000 Amiga made by Simon Archer and detailed in our October issue, would love this card ■
Andrew Kon

卷之三

APOLLO 630
Developer: ACT

System Requirements

1

11-172-5
Reprint rights to the best instructions
are also granted.

Seven Years later than the standard AGM99, and twice 2200.

附录

A good piece of kit with real advantages.



▲ The AIBB Q1000net test compares this board with a basic A1000 + basic AT280 + upper G3B and an A4000R40 1=ABUS performance.

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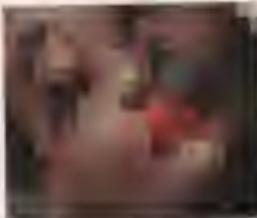


Wildfire 5 PPC

■ Price: 299DM (Amiga) 399DM (PPC) Approx £120, £160 ■ Supplier: Oberland Computer, Germany
 ■ +49 (0) 6173 6080 ■ E-mail: info@oberland.com

All of a sudden PowerPC is a reality and Wildfire is one of the first applications to be released to take advantage of it.

► Many of the effects and transitions don't come across well in stills. Here's one that does but there are plenty more dynamic alternatives.



Y

You know the old adage that goes something like "hardware is only as good as the software that runs on it"? That's going to ring true for phase 5's new PowerPC-based PowerUP accelerators. As you might expect, the mesh is being lead by graphics software - applicators that stand to gain significantly from the enormous increase in CPU power. Wildfire is a prime candidate and this, the first commercial release of the package, supports both 800x600 and PowerPC Amigas.

Demos

Wildfire has emerged from the demo and shareware scene into the commercial sector. You may remember a couple of stunning demo animations we featured on our April 96 and November 1996 issue CDs (Datedworld and Wild Summer). These were both edited to their final states from pre-re-

ndered animations using early versions of Wildfire.

There's nothing quite like Wildfire, but if you could imagine a combination of Adorage and Main Actor with a dash of ImageFX you'll have some idea of what's on offer. Like Adorage with its SSA (Super Smooth Animation) format, Wildfire also has its own special animation format called YAFA (there seems to be no explanation about what it stands for). It's a kind of IFF anim format but has additional features such as variable rates of compression to allow for playback speed to be traded off with storage size.

Unlike SSA which can only be output through the Amiga's internal graphics hard-

were, YAFA anims can be used with CybergraphX systems too. The YAFA animation format is optional so if you don't like it you can simply ignore it.

Learning to walk

Your first steps with Wildfire are likely to lead you round in circles. Whenever I first try out a new software package, instinct always urges me to the Open selection of the Project menu, but Wildfire has no pull-down menu at all. This in itself can be quite disorienting - where do you start? The reason given for the lack of menus is that at the AGA chipset is too slow to display them in high colour screen modes (if and bi) there's



▲ One of the features of the YAFA animation format is its ability to employ at double size to allow full screen movies with low storage overheads.

▲ The Transition Player gives a realistic example of each wipe with the aid of animated thumbnails.

PowerPC support

When run on a PowerPC Amiga (a Cyberstorm PPC 604 in this test) it shifts through its effects processing at quite a speed. Single frames are warped instantly, while sequences zip through the system with no thumb-twiddling required. It is a different story on a slower Amiga though. A Cyberstorm 060 takes care of things quite acceptably, but an FPU is almost essential and a 50MHz 030 is bare minimum if you've got any kind of reasonably large projects to deal with.

just too much in the program to be able to fit it all neatly into menus.

I'm not convinced. You could use Winfield on a fairly low colour AGA screen (say 16 m Multiscan mode) and it would be quite useable (you can always switch to a different screen to view your high colour results). That would allow for the use of menus and keep memory usage a lot better.

It comes on a CD (no English manual as yet) with just AmigaGuide documentation. Fortunately the CD is also loaded with plenty of examples and some impressive YAF4 animators. Read the documentation enough times and you'll eventually find out how to load a picture or an animation, then apply some effects to it.

Wildfire is by no means the worst offender I've come across - at least it uses standard windows, requesters, sliders and cycle gadgets. It's just that it all seems a bit haywire. No doubt once you know where everything is, it'll all come as second nature.

Animations

Enough of the interface. Let's talk about what it can do. Primarily it's an animation editing system. That's not to say it creates animations from a crutch (although it's good at stringing together stills into a sequence). The world 3D of those Wild Summer end Discworld demos was not the work of Wildfire, but Wildfire handled all the fades where one scene merges into another, the screen gets wrapped onto a spinning cube and all that kind of stuff. Wildfire also converted them to YAFRA format.

One of the best and more easily fathomed features is the Transition Maker. This takes two previously created animations (amm or YAF4 type) or two stills and makes a new (YAF4 only) animation by leading from the first to the second in one of a variety of ways. For each type of transition there's an thumbnail example animation which can be

viewed as you cycle through the list. You can set the amount of frames for the transition and that's about all you need to do. It's a scheme it's limited to outputting YAFAs only, but you can always convert them to standard anime if required using the Converter section.

Processing

The more unique aspects of the program come to light in the Processor department. This is where all those fancy 3D mapping effects are made. Some of the effects require something in the buffer to act as a kind of alpha channel, while others will work with just a single animation or picture.

You can have an optional preview of the

effect in a window on the main working screen or just dive straight in and process your full project. Most of the effects have quite a few variables that can be adjusted using sliders and cycle gadgets. Some of the best can turn pictures and animations into waving flags, spinning cubes and circular sine wave ripples.

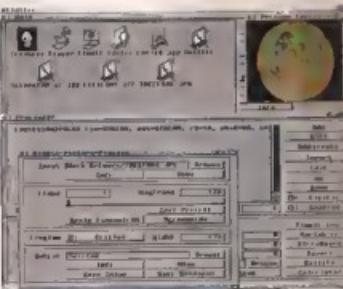
Presentation

While this is undoubtedly a very powerful, and indeed unique piece of software, it looks like something that evolved from a tool that wasn't initially designed for public consumption. What goes on behind the scenes is clever and has many uses, so it's a shame the presentation isn't a lot better. There are times when it can be infuriating, such as when you click on a button and nothing happens - it doesn't tell you what you want it to do, but neither does it tell you why it's not responding. It's also got a few bugs and crashes intermittently.

I don't want to go on a user-interface crusade, but user-friendliness is just as important as features. Let's say you were in the market for a fast new luxury sports car with all the latest gizmos. You get into the driving



The collection of effects and plug-ins is impressive. There's almost twice as many available as you can see here.



▲ This is the Processor section, in which Wildlife resembles an image processor along the lines of ImageFX, except that it can handle astrophotography as standard from the main program. This is one of more than CPU-intensive areas in which the PowerPC code really makes a big difference.

seat and instead of the usual arrangement of gear stick, pedals, steering wheel and indicator/wiper switches, you're presented with something that looks like the cockpit of the Space Shuttle. Hardly ideal is it?

Why not take that Jaguar XJS instead? That's got everything at your fingertips and a normal gear shift.

Conclusion

Before Wildfire can be ushered into the hall of fame it needs to be re-designed with a more disciplined working environment.

If it didn't show so much potential then I wouldn't bother giving it such a hard time over this, but it's obviously got plenty to offer. Also, as one of the first PowerPC Amiga applications it's inevitably going to be held up as something of an ambassador for the new breed of Amiga software, so it would be good to show PC and Mac users just what they're missing out on.

Regardless, if you're serious about making dynamic and eye catching animations, Wildfire should definitely be investigated. You can take a look at the shareware demo on the AmigaNet and this month a CD to get an idea of it for yourself ■

Tony Horwitz

WILDFIRE 5 PPC
Developer: WK-Artworks

System Requirements:
PowerPC (at least 700 MHz PowerPC recommended), 800x600
resolution, 16-bit color, 16 MB RAM, 100 MB free hard disk space.

This application looks like it gets better once you learn things about
the interface. It's a good learning tool for better
understanding of the Mac OS X interface.

This is a great application and we're happy to play with it.
It's a good application for those who want to learn
about the Mac OS X interface.

As far as I'm concerned and at the market, I'd like
to have seen a more polished overall product.

**A great tool for imaginative ani-
mators but needs tidying up**

Permedia 2

phas 5's PPC graphics cards are based on the Permedia 2 video accelerator. We take a look at the chip which could revolutionise the Amiga.



▲ Here's the powerhouse behind the phase 5 card, the Permedia 2 chip (see 3D Labs).

A

lot of excitement has been engendered by the announcement of phase5's planned release of a graphics card for their BlizzardPPC line of A1200 cards.

Much excitement has been at the thought of many A1200 owners, who'll at least be able to get a graphics card. Also, it doesn't cost a lot, the Cybervision version priced at \$495/DM or £219, and the Blizzardvision 499/DM or around £200. The story is that it's going to be better than a Picasso 4 too. Prepare for a shock - it's going to be loads better.

The Permedia 2 is a new generation of graphics chip. Older chips just cracked pixels at the screen, these newer models have a lot of computing hardware in them for generating 3D imagery. The most common use of this kind of hardware is in games, and such chipsets can be found in Playstations/Nintendo 64s, enabling high quality fast 3D with relatively low powered CPUs.

Many PC gamers these days will also have a 3D graphics board plonked into their computers, the current favourites being the Voodoo 3dfx based cards, which are capable of producing stunningly smooth 3D graphics. A major issue aside from gaming is for artists working in 3D graphics. With one of these 3D accelerator cards doing the difficult part of the job, objects can be rendered, shaded and lightsourced in real time in the preview

window of a 3D graphics/animation package making it much easier to see immediately the effects of any changes you make.

OpenGL

The most common system of addressing 3D graphics is the "OpenGL" API. This cross platform graphics standard is well established in the professional graphics market, but has faced a strong challenge recently from Microsoft's Direct3D.

High end graphics cards and Graphics workstations tend to support OpenGL, as does software such as Lightwave 5.5 but the truth is that games still do the shots in the way of hardware upgrading. Here Direct3D looked very strong, but Id Software championed OpenGL with their GL version of the market leading rendering package QuakeGL.

Where Quake and id go, the industry goes. As part of the CybergraphX regettable graphics system, since version 3, phase5 have shipped CyberGL, an Amiga version of the 3D graphics addressing language.

This was originally developed to go with the 3D chip on the Cybervision 64/3D card, but never got very far with that. The Cybervision 64/3D uses a primitive 3D chip called the S3 Virge. The performance of the Permedia 2 is so far ahead of the Virge it wasn't even worth our while trying to scale the performance of the older chip onto our benchmark graphs.



▲ Games running on Permedia 2 could look like this

2D Too

Unlike the Voodoo but like, for instance, the acclaimed Riva 128 chip, the Permedia has great 2D performance too. With 4Mb of 8bit wide SGRAM specified for the phase 5 graphics card, it does 1280 by 1024 screens in 24bit truecolour at 86Hz, or 1600 by 1200 in 24bit truecolour in 60Hz (NTSC rate).

Compare it to the specs of any current Amiga graphics card and you'll see the value of the 800MHz access speed for the local video RAM and a RAMDAC running at a fast 230MHz. 3D graphics is one of the fastest growing areas of computing today, and Permedia 2 is a solid choice by phase 5.

With hardware like this the Amiga will be an extremely tempting hardware platform for 3D graphics artists and would be more than capable of running any game you care to think of. Interesting times ahead! ■

Andrew Korn

How good is Permedia 2?

2D Graphics performance



3D Graphics performance



These performance graphs show the Permedia 2 to be very much at the head of the field, but as with all benchmarks, we advise caution. Other benchmarks place the Permedia slightly below the 3dfx.

Source - 3D Labs.

The hardware

The hardware specs are impressive. The Permedia 2 has a 16 bit Z buffer, a 230Mb RAMDAC, and an 800MHz interface to SGRAM video memory. It is capable of hardware gamma shading, anti aliasing, stencil buffers, Alpha blending and Pixel fogging. The chip is capable of 1 million texture mapped polygons per second, and 83 million textured, bilinear filtered, perspective mapped pixels per second... you what mate?

- **Alpha Blending:** Allows opacity data alongside RGB data for transparency effects.
- **Anti Aliasing:** Reduces jagged lines by smoothing with mid tones.
- **General Shading:** Artificially generated smooth shading to a simple geometric shape, gives the appearance of a smoother more complex shape.
- **RAMDAC:** The hardware which takes information from memory and sends it to the screen. The faster this is, the quicker the graphics card can draw the screen.
- **Texture Mapping:** Applying flat bitmap pictures to a 3D object to simulate textures.
- **Trilinear Mip-mapping:** A technique for processing texture maps which involves horribly complex calculations. Interpolated the bitmap data to map smoothly onto the 3D shape and avoid blockiness when the shape is viewed close up.
- **Z-buffering:** Stores depth information for pixels, allowing hidden surfaces to be easily calculated.

For more information on the forthcoming phase5 card, call a phase5 dealer such as White Knight on +44 (0)1920 822321, Power Computing on +44 (0)1234 851500, Blitsoft on +44 (0)1906 251466 or Waled Solance on +44 (0)116 2463800. If you have Internet access call up www.phase5.de for more information.

PD Scene

Stevie Bye has been a good little boy this year by the look of it, as Santa's given him plenty of games for review. Are they any cop though...?



Totally blinding
Good
Average
Substandard
Oh dear

Kangy

■ Type: Platform

■ Available from: Siddlestraps PD, 1 Lower Mill Close, Goldthorpe, Rotherham, S63 9BY. Tel. 01709 888 127.

■ Price: 80p plus 50p P&P

Kangy is a good looking but standard platform romp, presumably for kids. The idea is to guide Kangy the Kangaroo, complete with boxing gloves, up the screen to the exit whilst avoiding or punching out the nasties and of course picking up the goodies.

Almost straight away you feel that Kangy should be able to duck down, all through the game I had urges to duck below a nasty rather than top it one and not losing a life. If the game is meant for kids it is quite hard and I am sure desperation will soon creep in for any kid having a bash at it.

Just to make life even more difficult there are lots of boulder type baddies that you can't kill and there is a time limit.

But the most annoying part of the game is the bong sound effect every time Kangy jumps, it drives you mad. On the positive side you do get 5 lives to play with and the collision detection is pixel perfect. There's not that much more to the game, you collect all of the fruit on each screen and then put it in the collection boxes, avoid badgers and birds, look at the lovely graphics and turn the sound off.

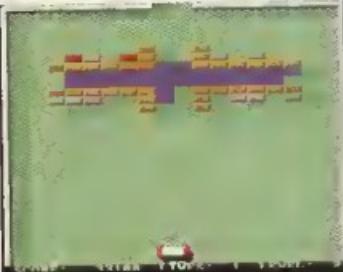
Kangy is possibly a good game that most kids will like the look of but it's marred by unnecessarily difficult gameplay - considering the target audience it's a bit of a shame that really if the first few levels were easier to complete the game would suck the player in immediately and Kangy would be a hit with the kids, probably.

Choki The Cyberpet V1.05

■ Type: Simulation

■ Available from: Glassic Amiga PD, 11 Deansgate, Radcliffe, Manchester M26 2SH. Tel. 0161 723 1638

■ Price: £1 plus 75p P&P per order.



It had to happen. You can now rear a Cyberpet on your Amiga. Even though the Cyberpet craze is about as fashionable as flares the programmer of Choki has seen fit to foist this 10 minute piece of programming onto a totally innocent Amiga public, wicked man.

For those of you lucky enough not to be familiar with the creatures I will expand further. A Cyberpet 'lives' on your computer and you have to look after it by taking it for "walkies", feeding and watering it, making sure it gets a good night's kip, goes to the toilet etc... In this particular version to keep Choki happy you let it watch TV, makes perfect sense to me. Top of screen are five meters displaying Choki's happiness, thirst, hunger, tiredness and cross leggedness.

The idea of the game is to keep Choki's happy meter high and the others low. You

Game of the Month

such as bombs, fuel and anti-gravity devices.

This demo version has 8 levels to what your whistle - the full version costs a very reasonable £6 and, according to the docs, offers many advanced functions and levels not featured here.

I loved the music in the game, the sound effects are good too - though you have heard them before, somewhere? But best of all what I really liked about CANE was that your rocket doesn't get blown up as soon as you touch a foreign object (which often happens in this type of game) and you have a shield which can be topped up. In addition you also have limited fuel to add a little touch of spice to the proceedings.

CANE has been written and well programmed in Blitz Basic; the scrolling is smooth enough and the inertia of the ship is spot on. The programmer sure knows how to write a game. CANE isn't the most original game you'll see this month but it has a touch of class and professionalism about it. A bit like Lemmings. Oops... very sorry! ★★★★

achieve this by clicking on the drink icon when he's thirsty and the hamburger icon when he's hungry etc. Apart from bad sound effects and aoyama graphics that's your lot.

Hardly going to tax the old grey matter is it? In Choki's defence you could argue that the program is just a bit of harmless fun; the only problem is that it isn't. Choki is pants. In fact I think I would have more fun at a train spotting convention for the blind. If you can get more than 30 seconds of fulfilment out of Choki then I feel that you should seek medical advice. ★★★★

Brik Fighter

■ Type: Break-out clone

■ Available from: Saddletridges PD, 1 Lower Mill Close, Goldthorpe, Rotherham, S63 9BY. Tel: 01709 888 127.

■ Price: £6p plus 65p P&P

Brik Fighter has been updated and re-released as Freeware. It's an Arkanoid/Breakout clone even the level designs look the same as the original Arkanoid. It has all the bonuses like, exploding bats, shooting bats double bats, multiple bats, level warp etc.

The gameplay is extremely smooth, very playable and, it must be said, quite addictive. Unlike a lot of similar clones I have played the author has succeeded in applying a realistic angular deflection when the ball hits the bat, which means you do actually have a small amount of control over where you want the ball to go and you don't get stuck with one brick in the corner of the screen for three days. There's little more to be said: you've seen it all before in a hundred or so other clones but Brik Fighter is at least one of the better ones. ★★★★

Gremions

■ Type: Game collection

■ Available from: PD Power, 15 Lovell Drive, Avenue, Aston, Sheffield, S26 2BQ. Tel: 01374 160972.

■ Price: 50p +75p P&P

This disk of games is entitled 'Useful Utilities Gremions' which should give you some idea of how this review is going to go.

The supposed star of the disk is a game called Gremions which is possibly the worst game I have ever 'played' in my life on any computer; ever. It pains me to even recall playing it so I will make it brief. You must move a badly drawn and badly animated bloke around some badly drawn platforms, collect the badly drawn blobs called Gremions and avoid the badly drawn nasties - which are just lines with things on the end.

The colours used in this game are vomit inducing, there is no backdrop and no sound to talk of. It's horrendous in all areas and worse you have a gut churning 100 Gremions to collect! Gremions was 'one-offed' with The Platform Construction Kit, not a good advert for said software I think.

The other 6 games on the disk are all ancient PD games that everyone has seen

CANE

■ Type: Thrust/puzzle

■ Available from: OnLine PD, 1, The Cloisters, Helsall Lane, Formby, Liverpool, L37 3PX. Tel: 01704 634 335.

■ Price: 75p

CANE (Cargo And Nothing Else) is a Thrust type game mixed with Lemmings type puzzles

The gameplay is simple but addictive, again like Lemmings. The graphics are dangerously similar to that of Lemmings too, so I think we can safely assume that Lemmings has a little to do with the inspiration behind CANE. As I have mentioned the word Lemmings 5 times already I promise I won't mention it again in this review.

The idea behind CANE is to guide your Thrust type rocket around the pretty scenery collecting all manner of objects including cargo crates and 'dudes'. The dudes leap up and down to get your attention. You pick up objects by landing on them carefully and then you must tow them back to a transporter. The amount of cargo that has to be collected is displayed on the score-line.

There are also goodies to collect to help you

before like Pong, Conquest, Klondike and Atoms. We all erased these games from our collections at least 5 years ago.

There should be a law against inflicting this sort of dross on the Amiga market; it's in a bad enough state already. Bring back henging i say! ★★★★

Marietto

■ Type: Arcade game

■ Available from: Classic Amiga PD, 11 Deansgate, Radcliffe, Manchester M26 2SH. Tel: 0161 723 1638.

■ Price: £1 plus 75p P&P per order.

The idea of Marietto is very simple. You con-

trol a Mario type figure at the bottom of the screen which you can move left and right using the joystick.

Above your head is a row of bricks; you can jump up and hit a brick to try and kill the looming baddies that swoop down at you. Sounds easy doesn't it? The catch is you mustn't hit certain baddies with the bricks. Objects like boulders and knives are flying at you from the edge of the screen to keep you on your toes, which you have to knock to avoid being killed.

The swooping baddies eventually do a kermitsize on you; you can kick these as well if you are quick enough. Annoyingly though, you get only 2 lives so most games will only

last a few minutes until you get the hang of it. Later on in the game you can collect bonus coins for points and the baddies also shoot at you. I have to say it, Marietto is just not my cup of rose. I found it frustratingly hard, boring and repetitive. However, like everything in life, Marietto will have its supporters. So if you yearn for the old 8-bit style games you may enjoy this, but to be honest, I've had more fun with a Spectrum emulator. ★★★★



Marie

PD Utilities

Once again here's Steve Bye with another bundle of goodies from the world of public domain software. Feast your mince pies on this little lot then!

Diz Explorer

- Type: Archive Interface
- Available from: Aminet and all good PD suppliers
- Price: N/A

Diz Explorer has been designed mainly for the handling of archives. It recognises 13 dif-

ferent archivers: LZX, LHA, LZH, LZ, LX, DMS, ZIP, ARC, ARJ, SIT, TAR, EXE and RAR which just about covers all the file types you are likely to come across on the Amiga and PC. This could be very useful when downloading PC software to your Amiga. To decompress any of the supported archive types you just select the file and click on

★★★★★	Totally blinding
★★★★*	Good
★★★★	Average
★★★	Substandard
★★*	Oh dear

'Uncompress'. The program also supports archive conversions which is useful if you have say ZIP files on your Amiga, just select the file or even a whole directory of archives and tell Diz Explorer to convert them to LHA, LZX or any other format and it will all be done for you automatically. DE also supports most forms of file ID's. These are small ASCII files usually contained with or within

Utility of the Month...

Scion

- Type: Genealogical database
- Available from: OnLine PD 1. The Cloister, Halewell Lane, Formby, Liverpool L37 3PX. Tel: 01704 834 335.
- Price: 75p.

The term defined in my dictionary under 'scion' says 'descendant, heir' which should give you a fairly good clue of what this program is about. It's a database for keeping track of genealogical information, ie. A family tree.

It has many excellent features including support for IFF picture files, free form notes, printed reports and on-line context-sensitive help. Scion is Freeware and has been around for some years, but luckily has seen many bug fixes and revisions. The latest version (V4.09) seems to have mopped up even the tiniest of bugs and I would be surprised to find any bugs at all in the well written program. A few years ago I did have a go at defining my family tree with Scion and I can tell you the research you need to undertake can be quite heavy going once you have finished covering your living relatives but it is also very interesting. For example I was shocked to discover that on my Grandfathers side almost all

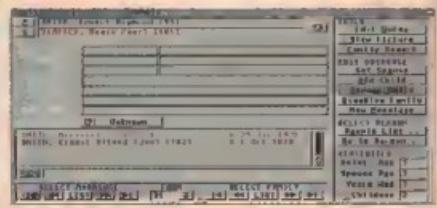
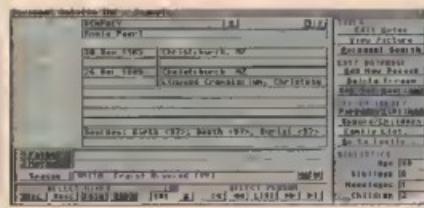
of his immediate male relatives were killed in the first world war and I had a great, great uncle who was an inventor I won't go into what some of my ancestors supposedly got up to though! I never completed the tree properly as there were just too many missing links but it was meeting scion and Scion held up well. I just wish I still had the disk. Scions front end is extremely easy to use, you don't need to read the instructions but a quick skim through the guide would be sensible. To start a tree you simply click on 'Add New Person'. You can start a tree at any point, so if for example you were creating your own family tree you could start with yourself, you simply fill in the point and click form with your personal details. If you are married you just click on 'Add Marriage' then fill the details. If you have children just click on 'Add Child' and so on. As I said, it is all very straight forward. Once

you have entered some data Scion can produce pedigree charts to your printer or the screen.

Scion can even handle multiple marriages, unconventional marriages, adopted children and unmarried parents. And just to make sure everyone is happy there is a flexible search option, locale support, multiple Aplex ports, support for virtual memory, runable on Pal or NTSC from floppy or hard drive. I tried very hard to find something to criticise about Scion to balance this review but I just couldn't find anything.

Scion is a superb piece of Amiga software that makes what would otherwise be a complex task into a pleasure. ★★★★*

Utility of the Month



an archive. The extensions supported are TXT, DIZ, INFO, INF, DOK, DISPLAYME, README, DOC, TEXT and GUIDE. If when you select an archive file ID is found, the contents of the file ID will be displayed in Explorer's window.

It's very useful for skipping through a lot of archives say on a CD for example. There is also support for Amiga archives. Other time and hassle saving features are Diz Explorer's Mount RAO and Mount FFX options, you can now mount these devices with a click of the mouse. Then there is a file list creator for directories or devices, and launch, copy, move and delete files. DE will be useful for handling unusual archive formats and painlessly mounting RAO. It's nothing earth shattering but a useful utility to have in your collection. ★★★★*

The Lottery Predictor V2.8

Type: Lottery prediction

Available from: OnLine PD, 1, The Cloisters, Halehall Lane, Formby, Liverpool, L37 3PX, Tel: 01704 834 335.

Price: 75p

No, not another Lottery Predictor I thought, although I initially liked the look of this.

It's written in Amiga but using an extension called AWE. AWE has a few minor problems but overall most non-programmers won't notice the difference to normal Intellimode programs. The program itself has a dazzling array of features which I do not have room to list here but the Permits and Number Wheels features are useful and you can view stats from the draws in many variations. The program comes with a data file that covers the first 127 draws to March 97, which includes Wednesday draws.

I decided to update the file but soon realised there are errors in the data file, the first is that the numbers for draw 125 are completely missing which caused me a headache. I had to renumber 30 draws

because of it. When I ran it again the draws were corrupted and the program refused to recognise anything past draw 121. I reverted to the original data file and entered all the draws up to 161 by hand in a text editor. I ran the program again and the draws were still corrupted. I then got yet another kick in the teeth, this demo will only take 150 draws max - which it doesn't say in the docs.

I am just glad I didn't enter all the draw numbers to date, what a waste of an evening. I soon realised the program was bugged beyond use. It seems to replicate draws whether this is because of the data file or the programming itself I do not know. It's possible someone other than the programmer messed with the data file before I got hold of it as I can't believe the programmer wouldn't have noticed a huge problem like this. When the bugs are ironed out TLP could be worth a look though. ★★★★*

Sweet Cheater V5

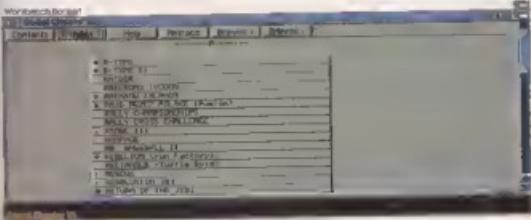
Type: Database of cheats

Available from: OnLine PD, 1, The Cloisters, Halehall Lane, Formby, Liverpool, L37 3PX, Tel: 01704 834 335

Price: 75p

There are plenty of cheat lists around but Sweet Cheater has to be the best I've seen. It has cheats, hints, tips and codes for over 1000 games. The list is presented in a well constructed AmigaGuide document and it's easy to find what you are looking for.

I conducted a little experiment on Sweet Cheater, I looked up the first 10 games that I could think of, and they all had an entry - impressive. Also in SC's favour is that the author has credited his sources which makes a change. Probably the best of its kind at the moment. ★★★★*



Best of Aminet

It seems that there has been a bit of a glut of games turning up this month, including a few aces looking dopes of the latest licenseware games. Football fans make your way to *gama/demo/euro_men.lha* (439k) to try out Europa Manager. Take charge of one of the giants of Europa and challenge for the European Super League title. Simplistic but fun. Gore fans should tune in to *gama/demo/proto.lha* (677k) for an astonishingly polished looking Operation Wolf clone from Comatose. Some old 'horizontal scrolling line bed guys up in your crosshairs and shoot them gameplay', but with very nicely drawn graphics - a great piece of fast action nostalgia.

MP3 encoding allows near CD quality audio to be compressed into a very small space, but decoding it in real time is hard work. PPC boards come with a player which keeps it barely ticking over, but the real serious guys use hardware decoding such as is provided by the NSM translucent ISA card. If you have active ISA, using a GIG or one of the new ISA equipped Amigas from Lader, you can use one of these cards too, with the driver you will find at hard/drivr/trusaamiga.lha (25k). There seems to be a bit of an alien theme amongst the artists of the Amiga world this month, with all sorts of people uploading images of alien space stations, strange creatures and weird landscapes. Top aminet Artist Francesco Gambino contributes *pix/traca/allanat-teck.jpg* (74k) to the collection.

My favourite upload this month is the wonderful but needless misc/misce/poetry.lha (84k), a random poetry generator less random and more surreal than any I have seen before. With the definite text dictionary, it somehow came up with the following:

The unimaginable barrenness nurtured the guardian, / Hell rammed the silent woman reached out for him, / She loved his suffering unceasingly, / Godlike, the unimaginable barrenness anguished the unforgiven, / Unknown, it's soul was a reflection of them, / It longed to touch their amply axx. Great stuff, but total gibberish.



Why Apple?

One day we all hope to see the rebirth of the Amiga with a PowerPC processor and other new features to enable it to compete again with today's systems. Sadly though, more than 2 years since Commodore's demise, little of substance has actually happened. We've seen prototypes and heard promises - we all hope to see new Amiga developments.

If you can't wait and need more performance today without paying the earth - there's only one real alternative to consider. There's never been a better time to think Apple®.



Only Apple offer you both desktop and portable computers that truly match the ease of use the Amiga brought to your desktop. Affordable Apple Macintosh systems have PowerPC™ processors with thousands of off-the-shelf programs available in areas where the Amiga was always previously so strong.

And, if you need the most compatible of all computers, Macintosh is currently the only system that can run MacOS, DOS and Windows applications via optional DOS Cards or SoftWindows software.

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CREATIVE STUDIO software is as detailed above but without offer. PAYMENT OFFER software plus include of the Earth Pack

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Why Macintosh?

PERFORMANCE

Older Macs have the latest PowerPC RISC processors (most old Personal systems are still CISC designs). Even early desktop Macs run at 10MHz but most 50MHz powerhouses at the top of the range (the Powerbooks portables offer up to 240MHz).

SOFTWARE CHOICE:

Macintosh software packages (written especially for PowerPC Processor Macs) have been shipped since Power Macintosh was launched in 1994 - plus there are thousands of industry standard programs such as Microsoft Word and Excel, PageStream, PhotoShop and many others developed for the Mac.



CREATIVITY:

- Macintosh will dominate the creative world with an 80% market share in colour publishing.
- 100% of pro production video editing firms Mac.
- Macintosh is the most widely used system for the creation of Internet web pages.
- Most magazines (including the *Time* magazine reading, right now) are created on Macintosh.



Multimedia:

- Apple is the world's No. 1 Multimedia PC vendor.
- All desktop Macs have a fast CD-ROM drive as standard (many portable have internal CDs too).
- In 1995 42 of the top 50 selling UK CD-ROM titles worldwide were developed on the Macintosh.
- Many Mac owners have built in TV style teletext so TV clips can be recorded directly to disk at QuickTime resolution.
- Many Macintoshes have built in video in and out for direct recording to VCRs.
- Some Macintoshes have internal digital video editing facilities as standard and many others can include the facility with an easy upgrade.



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- Apple 15" AV MultiSync
Apple 17" AV MultiSync
Apple 17" Video MultiSync
Apple 21" HyperSync E30

LASER PRINTERS:

- Apple LaserWriter 4000PS, 44, 4000N
4000L, 44L, 44, 4000N
Apple LaserWriter 4750PS, 47, 4050N

GRAPHIC TABLET:

- Apple 17" AV MultiSync
Apple 17" Video MultiSync

COMPUTERS:

- Apple iMac G3
Cirrus Logic AV All-in-One
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ISDN, THE INTERNET & COPIERS

- ISDN is the latest standard for business and may include modems with full send/receive fax and internet phone. Adding an ISDN connection is easy.
- Industry standard web browsers, Netscape Navigator and Microsoft Internet Explorer were developed for the Mac, meaning access to Worldwide Web sites is easy.
- QuickTime, the Internet's standard format for video files, or QuickTime for Windows, are both Apple products. Of course QuickTime comes as standard with every Mac.



CONNECTIVITY & EXPANDABILITY:

- Apple's 34-pin I/O port on Macs have networking built in as standard as connecting systems together and adding shared printers etc. couldn't easier.
- All Macintoshes have an external SCSI connector as standard, adding external drives, SCSI hard disk and other cartridge drives, servers etc. really is plug-and-play.
- Low-cost digital cameras can be plugged into the Mac for instant real image input.



EDUCATION & ENTERTAINMENT:

- Being the world's No. 1 educational supplier, quality Macintosh software is widely available. During last year, often superb packages like The Human Brain Body and more it is a vast supply from other leading software publishers too.
- Because Macintosh is the preferred system within many educational establishments high quality software is assured.



ENTERTAINMENT & GAMES:

- Top game titles, like *Ultimate Doom*, *Myth: Rebel Assault II*, *Dark Forces*, *Deaceas: Afterlife*, *Lost Colonies*, *Legend of Kyrandia*, *Pit Thistle* & *The Dog* have all been developed for Macs.



DISPLAY & PRESENTATION:

- A continuing and growing printer range (from Epson HP, Apple and others) is there is no easy and with printer quality output the results are truly outstanding.



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- Apple's finance division offers the widest range of financial and accounting software.



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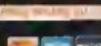
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CD-ROM Scene

Another Aminet CD, fonts for maniacs, and a multitude of games to choose from. Andrew Korn gives you his verdict...

Aminet 21

■ Available from: Weird Science, Q house, Tivoli way business park, Humberstone Iris, Luton LU1 9HA
■ Price: £10.99 plus £1 pp

Guess what we're going to take a look at an Aminet disc. Surely this is boring by now.

But not! Somehow the Aminet discs are still the top Amiga resource, still scaling the heights of the best sellers chart month in, month out. In years gone by, it was entirely obvious why this was the case, but with magazine coverboards aplenty and 20 previous Aminet discs, it's hard to believe they can still be such an essential purchase.

Sure, with all that software going straight onto the Aminet CDs, getting one of the cheap subscriptions to the Aminet and having it posted through your door every month or so when it comes out is a way to get an unparallelled and exhaustive personal library of PD. On the other hand getting a sub to CU Amiga CD edition gets you a library of software less complete but more selective.

Let's face it, once you have a dozen CDs full of software, you are not going to be short of programs to look through for at least a decade or two.

The lasting appeal of the Aminet CD

ROM stems from the fact that they contain everything and make it very easy to get to it. The archive is stored in the form it is on the Internet, divided into directories and sub-directories according to the sort of thing it is. The software is stored in archive form, so it can, of course, be installed by hand via shell, Opus or similar. Alternatively you can access

Where's all the software of Aminet 21?

biz	32MB
comm	36MB
demos	95MB
dev	19MB
disk	5MB
docs	32MB
game	124MB
gfx	45MB
hard	1MB
misc	32MB
mode	275MB
mus	19MB
pix	217MB
text	5MB
util	34MB



it either through the supplied filer on Opus 4/SIO like Iwm lister program which allows you to copy, unpack, view etc, or through the brilliant powerguide index.

This is basically an Amiga guide which allows you to browse through lists of the software with short descriptions. Click on a short description and it displays a longer description to you, click on the name of the software and it will unarchive it to the directory of your choice or execute from RAM, or if it is a picture, animation or musical file then load an appropriate player and play it. If you want to have a free reign then it's fine, but there is more organisation to it than that.

There is also the option to sort through lists of files according to what was down loaded the most. The pictures can be sorted through using a small thumbnail viewer package, there are selections of demos listed according to their compatibility and how highly the CD compiler rates them, and the mod collection can be accessed via author or via areas referenced style list.

Each mod is rated from 1 to 9 and there is even a nice shuffle play option. The layout of these discs has been polished and perfected over time, after all 20 previous discs certainly makes for a lot of prior experience.

So what about the content? Cast your eyes to the boxout and you'll get some idea

of what is available. As always, it is a mixed bag. Some isn't worth the CO space, other bits are pretty much indispensable. This one comes with all the latest patches that have been put up by commercial companies, all the latest versions of the big shareware units, an almost endless collection of mods, demos and graphics, demicards and so on.

There are demos of Orthoscape, Trapped2, Flying High Trauma Zero and more in the games section, the latest Burn It, Picture Manager Pro and Wildfire demos in the bjemdemos drawer, and plenty more to keep you going. Another installation in the irrepressible Aminet series, what more need be said? **89%**

The Games Room

■ Available from: Epic Marketing, Epic House, 43 Akers Way, Systech, Wilts, SN2 2NF Tel: +44 01793 514188

■ Price: £12.99 plus £1 pp

Imagine my disgust when Epic sent me this monstrosity. Not only are there half a dozen different software games, but there are about 40 assorted solitaire variants, Bridge games, Whists, Cribbage and so on. There is even the obligatory Klondike with





around 200 (count 'em!) cardsets, going from Archetypes to X-men and taking in everything on the way – particularly if everything isn't wearing very much.

Don't like card games? OK, if that's your attitude, try the pub games drawer with a few of those darts games Kingpin, and a demo table from the excellent Slam Tit Pinball game. Alternatively the boardgames drawer has a good 30 odd games, various shades of chess, chequers, backgammon and so on. Tetris addicts steer well clear; there are over 60 variants here enough to keep you unable to move from your computer for a few years, and even Mah Jong comes in 7 different flavours. The casino games and fruit machines are there for anyone odd enough to like playing fruit machines with no prizes, there are 15 Workbench games, about 30 puzzle games and a few odds and sods elsewhere.

This is a real grab bag of titles. There are a whole load of absolute Amiga nightmares but there are also some true classics. It can be real fun sorting through the disc to find the bad titles too, something like the execrable World Championship darts, although be prepared to reset your computer a lot, there are all too many games here which tauntingly refuse to quit.

The idea of The Games Room is not a new one, but it is certainly a very complete one of its kind. It is a dual format CD with around 500 games evenly split between Amiga and Windows, many of which are bad, but some of which are rather excellent. If your idea of gaming begins and ends with fast action hi-res extravaganzas, then you're paying rather a lot for a covering demo of an old pinball game, the only thing on the disc which comes close.

If you are after enough rainy day material to keep Noah happy then there is no doubt that this provides. Don't expect to see a whole lot of brand new material here; it's mostly just the usual subject but if you don't have a collection yet, this is going to be the best you are likely to find. **90%**

CD of the Month

Fontmania

■ Available from: Weird Science Q house, Troon way business park, Humberstone Lane, Leicestershire LE4 9HA
■ Price: £9.99 plus £1 p/p

Take a close look at a CUDD icon and you will see that the writing on it is a tasteful font, selected on a monthly basis from our limitless collection of colour fonts.

We wish. Actually finding a new colour font for the CD every month is a bit of an epic task. Anyone who does a lot of layout work, artwork, video titling or anything remotely similar, is going to some day run into a lack of font. Fonts are a bit like money, however much you have, it still isn't enough.

Oh sure, it's a bad idea to use more than 2, maybe 3 fonts in a layout, but one day inevitably you want to do something new. Find some really lousy font, use a typeface with bullet holes in it or whatever. However big your fonts dir, that perfect font just inevitably won't be there. This is why the CD-ROM was invented.

There have been countless CD-ROMs full of fonts in the past, but there hasn't been one in a little while so Weird Science figured it was about time someone produced a single all encompassing font CD-ROM and have done with it.

Stick the CD in your drive, open the disc icon on Workbench and you get an empty window. There are a couple of text files there but not even a file reader to view it on. One is a readme with a quick list of the drawers and how many fonts they have in them; the other is a full list of all the fonts, a monstrous 2Mb text file which should generally be avoided.

There are a total of 10,794 fonts on the

disc, which translates to something more like 3 or 4 thousand if you ignore the fonts which are repetitions in a different font format or ones you'll have difficulty persuading an Amiga to read.

So are the fonts any good you ask? Hard to criticise the quality when you have them in this sort of number. The range of monochrome fonts is excellent and can't be faulted. If you want a font, it will probably be here.

The colour font did not fare quite so well with a lot of them refusing to load into Phantasm at all and finding fonts with such luxuries as lower case, numbers or dare I say demanding punctuation, was heretic. The IFF fonts aren't so easy to use but are often a better choice, and include the blue rose and glockens collections.

The real kick on this disc is the indexing. Look in the near identical bitmap and intelligent directories and you will see nice IFF index files, but other than that there is a lot sorting through to do. It would be nice if there was a single index of all the fonts on the CD, something which would be a little time consuming to do but would polish off the package perfectly.

You will probably end up copying the fonts that you really like onto your hard drive and then keep the disc aside for special occasions – but come those special occasions you will be cursing at the lack of an index.

The ideal would be a printed catalogue but this is a very cheap CD. A catalogue on disc in a ready to print format would make this the unquestioned king of font collections, but at under a tenner you can't really go far wrong.

A best buy for font users. **90%**

THIS FONT IS PURE CHEESE

IT IS ALSO ONLY IN CAPS AND HAS NO PUNCTUATION



and so on



Art Gallery

Are you a Digital Dali? Computer Caravaggio? Send your pics to:
Art Gallery, CU Amiga, 37-39 Mill Harbour, Isle of Dogs, London E14 9TZ.



Paul Hanson created this image by superimposing a scanned photograph on a Lightwave render. He used ImageFX to do the superimposition and used the radial star effect to produce the glow on the leg. The edges of the figure suffers from Jpg artifacts, but it isn't clear whether this is a problem with the original scan or something introduced when Paul jpegged the pic to send in.

Put 'em up by Steven Greenfield



©1997 Polymorph

A great bit of photo manipulation with a good sense of humour. The fairy figure would blend in better if the lightsourcing matched that of the main image. This is the trick of really believable superimposing.

Modern Times by Jordan Cedry



Jordan is a bit of a Cinema 4D fan, and a bit of a Babylon 5 fan too, judging by the other images he sent. This one gets in for being a bit unusual!

Starburst by Peter Deves



Peter sent in this alternative view of the scene printed last month. The composition and lighting is a real improvement.

Galaxy by Girish Nath



This simple image from Art Gallery favourite Girish Nath was done in Lightwave with the colour map for the nebula done in Photogenica. Look at the small moon catching the edges of the sunlight as it comes out of eclipse - this highlight balances out the image perfectly and works with the lensflares to make a strong diagonal composition.

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Amiga Workshop



As ever Workshop continues to educate, enlighten and bring goodwill to all men...
In actual fact the only thing Workshop can't help you do is stuff the turkey!!

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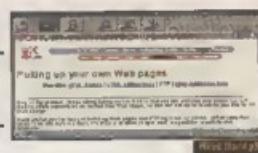
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With soap boxes underfoot, CU Amiga staff and contributors let the world know just what they think about stuff. Don't mess.



PART 13

Imagine 4.0

We've looked at many aspects of using Imagine over the past few years (yes, years!) but we've yet to look at the ultimate goal: creating a lengthy animation.

There are plenty of tricks to pass on when it comes to rendering your own version of the Star Wars Trilogy or Jurassic Park 3, and I hope that by the end of this you'll be tempted to have a play.

Before we get started, it's important that you have the right hardware. There is little point trying to create a long animation if you can't store it, in other words, a hard drive is essential. I'd go further than that though; a fast hard drive is essential. Larger animations will have to be spooled from disk, that is read and displayed in a continuous process, and so a fast disk is essential. This means that a large capacity 3.5" disk will be required. EIDE drives are fast, but a SCSI2 system will be faster too, which you use depends on your Amiga.

It almost goes without saying that a fast Amiga is a good idea, and a 6030 or better processor is a must. Memory is important too, not only for rendering complicated scenes, but for improving the results for playback. Memory is quite cheap at the moment, and a 16MB Amiga is a good start. Plan it in advance.

More trite advice, but it is important. If you are planning an animation which has many different scenes, camera viewpoints and objects, put your thoughts down on paper. Your objective is usually to portray a story, so you need a beginning, middle and ending.

Your opening scene might be dramatic, or low key, that's up to you of course, but you might consider a subtitle to set the scene. Adding some frames which consist

of a few lines of text, X-Files style, can be easily done with a paint package.

The best way to plan things is to sketch your ideas down on paper. Don't worry if you can't draw because no-one else need see these scribblings. This is your storyboard, and you should include details such as camera angles, the objects included in the shots and the length of time you want to the

shot to last. You are effectively acting as the Director of your own film, and no Director is going to start shooting until he or she knows exactly what they want to achieve.

At this stage you might want to think about whether you are going to include any live action scenes in your animation. With a genlock, you can add rendered graphics to a 3D scene. In fact, a superb trick is to render your spaceship, using the genlock transparency colour for the main window. Set up your cameras, and then load and display the rendering scene, with careful tweaking you can dress up and appear to be inside the cabin of your spaceship, as the live view from the camera will only pass through the window.

This is an adaptation of an aged technique before computers came along; special effects people would paint elaborate images onto glass, and place this in front of the camera, filming actors behind. *Wings 2001: A Space Odyssey* is the seminal example.

Use other computers to speed up rendering

If your Amiga isn't the fastest rendering machine in the world, and

you haven't got the spare cash to buy a 69030 board, try making use of your friends systems. Supply them with an Imagine project, and ask them to render it in their spare moments. Obviously you will have tested the images thoroughly, by both rendering a wireframe or other simpler version, and one or two full, high-quality images.

If one of your friends has a PC, ask them nicely too. Imagine is available for this platform, and even an entry level PC can render 10 to 20 times faster than a 68040 blessed Amiga (see pic 182).

Designing models: different models for different scenes

You've spent hours, days even, designing your superb alien attack craft. It really looks the business, with carefully drawn brushmaps and minute detailing on external exhaust ports. When you place it in your scene for rendering, it appears in a block of the screen sixteen pixels square. Ever wondered if your time was well spent?

This is why planning is so important. If you are going to use a model only in the distance as a tiny little



spec, then for goodness sake don't waste time adding detail which will never be seen. Your alien ship might have looked exactly the same if it was a collection of three rectangles given a shade of grey.

Not only have you wasted your time designing the object, but you are wasting rendering time too. Imagine takes up more memory and resources with detailed objects, and needs to load and store all the brushmaps for example.

What happens if you want to create a model which appears both as a close up, and as a distant object? Use two models of course. Create a simple one for long shots, and a more detailed one for close-ups. If you are planning an extreme close-up when only a portion of the object is visible, then design a model with only the necessary parts. If your scene calls for a close-up view of a porthole, don't spend hours on the engines and cargo bays which aren't visible. (see pic 3d)

This is an extremely simple technique to use, as you can create different models and save them as different names: SHIPCLOSE, SHIP-FAR for example. However, this can also be very useful to speed up your test rendering.

There are times, when you must render your animation to see if you have the movement right. However, you don't need to render a 100% accurate scene. Sometimes a wireframe preview will do perfectly well but other times only a solid object will do.



In these situations you can make use of the fact that Imagine makes it easy to change the object used in a scene, even after it has been loaded, positioned and stored in the Stage Editor. Here's how: Imagine you have a scene involving a spaceship, which you want to fly past the

camera. Create two objects, one with minimum detail, and the other your fully-lit model, no expense spared, model. Name them SHIPHIGH and SHIPLOW. It's important that both objects are exactly the same size, so construct one using the other

Set up your scene as you would normally, using the SHIPHIGH object. Now, go to the Action Editor and locate the Actor which is your ship. If you click in the blue bar, you will be able to change the name of the object to SHIPLOW. Everything else will remain the same: the position, the path, the special effects, but your test renders will happen a great deal more quickly. (see pic 5)

Pre-rendered backdrops

We've already discussed in detail how to use pre-rendered backdrops to speed up rendering, so there is no point going over it again. Remember that a long animation is the perfect opportunity to use this technique, and don't be afraid to experiment with backdrops which are actually scanned or digitised from live sources instead.

Some of the NASA Hubble Space Telescope images are perfect for space background, and even better, totally royalty free. You'll find them on the Internet and on various CD-ROM collections.

Calculating times carefully

Timing is essential in an animation, and you have to have a feel for how



long your animation will last. Try to picture the movement in your head and judge how long the scene will last. I always tend to underestimate the length of time a scene should last, so I automatically double the length.

Remember that you have to take into account the number of frames you will be replaying a second. In an ideal world you will be displaying 25 frames per second. However, this figure depends on many factors: the screen mode, the speed of the Amiga, whether the image is playing back from memory or whether it is being spooled from hard disk. You will have to experiment to find the frame rate you are using.

If, for sake of argument, it's ten frames per second, then a quick burst of mental arithmetic leads us to the conclusion that a twenty-second clip will require 200 frames of animation.

Playing & Recording your animation

The end result of all your work will be a huge collection of IFF files. Each frame will need to be collected into a single (or maybe several) ANIM files. There are plenty of software packages around to do this, my favourite is Main Actor Broadcast (see pic 6).

Playing back your animation isn't always easy. A very long animation will invariably not fit into memory at once, and so you'll need to find some other way of playing it. The simplest option is to play what you can, and record each segment to videotape as you go.

Unfortunately most video recorders aren't great at stopping and starting whilst recording, even



in Pause mode. They have a nasty habit of rewinding slightly, and if you aren't careful you two second clip will be eaten by the editing process.

If you have a fast Amiga you should be able to spool the animation from hard drive fast enough to look convincing. As I've said, this will depend on the screen mode used, but a program such as Viewtek does an excellent job.

This is especially true if you en-

ableton is converted from ANIM6 to ANIM7 format first. If you are very lucky, you might have or know someone with a VLAB Motion or other real-time animation system.

These packages use hardware video compression to capture and replay animations, and with one of these you can edit your final film and then play it all back in one go directly to video tape. There are similar systems on the Mac and PC if you should need to go that route.

That brings us to the end of our seemingly never-ending look at Imagine. I hope you've enjoyed it as much as I have, and that you'll forgive me the mention of the dreaded PC.

Imagine is one of the all-time great pieces of Amiga software, and I doubt that I will ever make full use of all of its features. If you want to contact me with specific questions on Imagine, please visit my web site at www.sticky.net. ■

John Kennedy



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Amiga C Programming

This month we're going to be visiting a couple of good libraries... but not for books.

One day, many years ago, some bright spark hit upon the idea of fashioning a round piece of stone (or wood) and rolling it along the ground. We look back now and feel very grateful that they shared this idea with other people, or else our world would look very silly.

That was a strange way to start this tutorial; I'll grant you, but the point is that re-inventing the wheel is an activity that programmers are very prone to. When you're just starting out and learning how things fit together, it's a good idea to start from scratch and make all the mistakes others have made many times before, but once you've up and running it's much more efficient to reuse other people's hard work.

Can I have a file?

Take a boring old file requester, for example. To make one of those out of the basic components of gadgets and directory lists would take quite

PART 6

a long time. And on the way you'd probably make a number of mistakes and this would generally detract from the main purpose of your real program.

Luckily, your Amiga comes supplied with a number of handy routines that take a lot of the drudgery out of programming common idioms. We've seen this already in the simplified menu creation offered by the GedTools library, but this month we're going to take a look at another standard library: ASL (which probably stands for Application Standard Look or something equally silly, since Commodore seem to have avoided a definition in their documentation!) This library makes it very simple to create standard file font and (in later versions) screen mode requesters.

The use we'll put it to is to create a load and (eventually) a save file requester. But what good are such things to our program? What do we have that could be loaded or

saved? The answer is, of course, the nice picture you paint. So, for the second part of this tutorial, we'll take a look at Christen Weber's 'Universal IFF Library', which is very old, but almost a standard library (an archive is supplied on the disks).

Back to ASL, the first example on the disks is "asl0.c" which builds on last month's final example. The dif-

ferences are the addition of code to open the ASL library and an extra "Load" menu item, with corresponding code (the "load()" function) to react to this new item (see Example 1). Don't expect too much, yet, as this first example doesn't do anything with the requested file.

If you study the example and the documentation for the ASL library,

Example 2

```
int createBitmap()
{
    /* The MEMCLEAR flag is vital, since it zeroes the
     * allocated memory. */
    /* Thus the pointers in the bitmap will be NULL if
     * we don't manage to */
    /* allocate them properly. */
    if(bitmap = AllocMem(sizeof(struct BitMap), MEMP_PUB-
LIC | MEMP_CLEAR))
    {
        int plane;
        InitBitmap(bitmap, scr->BitMap.Depth, scr->Width,
scr->Height);
        for(plane = 0; plane < scr->BitMap.Depth; plane++)
        {
            bitmap->Planes[plane] = AllocRaster(scr->Width,
scr->Height);
            if(bitmap->Planes[plane] == NULL)
                return FALSE;
        }
        /* If we get here, we succeeded. */
        return TRUE;
    }
    else
        return FALSE;
}

void freeBitmap()
{
    if(bitmap)
    {
        int plane;
        for(plane = 0; plane < scr->BitMap.Depth; plane++)
        {
            if(bitmap->Planes[plane])
                FreeRaster(bitmap->Planes[plane]), scr->Width,
scr->Height);
        }
        FreeMem(bitmap, sizeof(struct BitMap));
        bitmap = NULL;
    }
}
```

Example 1

```
/* Open an ASL load file requester */
void load()
{
    struct FileRequester* freq;
    if(freq = (struct
FileRequester*)AllocLocalRequest(ASL_FileRequest, NULL))
    {
        if(AslRequestTag(freq,
                        ASLFR_TitleText,      "Load
File",
                        ASLFR_Window,         drawwin,
                        ASLFR_Flags1,
                        FVF_DOPATTERNS,
                        ASLFR_InitialPattern, ".tiff",
                        TAG_DONE))
        {
            /* Directory is in freq->f_Dir, file in freq-
>f_File */
        }
        /* ...else request was cancelled */
        FreeAllRequest(freq);
    }
}
```

Example 3

```

char *filename[MAXFILENAME];
/* Create complete filename from ASL's dir and file */
strcpy(filename, loadreq->rf_Dir);
if(AddPart(filename, loadreq->rf_File, MAXFILENAME))
{
    IFFL_HANDLE handle;
    /* Try to open the IFF file */
    if(handle = IFFL_OpenIFF(filename, IFFL_MODE_READ))
    {
        LONG count;
        WORD colorable[256];
        /* Get colour information and change screen
        colours */
        count = IFFL_GetColorTab(handle, colorable);
        LoadRGB441(&scr->ViewPort), colorable, count;
        /* If we can load the picture, update window's
        display */
        if(IFFL_DecodePic(handle, bitmap))
            CopySBMMap(drawwin->sLayer);
        else
            printf("Error: could not decode IFF picture\n");
        IFFL_CloseIFF(handle);
    }
    else
        printf("Error: could not open IFF file\n");
}
else
    printf("Error: could not make filename\n");

```

You'll notice that the "ASLFR_Flags1" tag seems a little out of place. This raises a rather thorny issue because the reason that this tag is used instead of the dedicated tag "ASLFR_DcPattain" is to retain backwards compatibility in these tutorials - it's been assumed that you're running at least AmigaOS 2.0 (ie, KickStart V37). However, in AmigaOS 2.1 (V38) the ASL library was radically overhauled with a host of new tags (and a new naming scheme). But the V37 ASL library just ignores the tags it doesn't recognise (in all these new ones), so to get the same behaviour in V37

we have had to use the method that works in V37.

A bird? A plane?

To load and save a picture we need to make a rather significant change to our existing setup. The key issue is taking control of the data that is displayed. Normally Intuition is responsible for merging the graphical part of the window (ie, the bitmap) and we can't get hold of this directly. So, what we need is a different kind of window, one which

Example 4

```

char *filename[MAXFILENAME];
/* Create complete filename from ASL's dir and file */
strcpy(filename, loadreq->rf_Dir);
if(AddPart(filename, loadreq->rf_File, MAXFILENAME))
{
    /* Make sure our bitmap is the same as the display
    */
    SyncSBMMap(drawwin->sLayer);
    /* Try saving our bitmap, using the screen's colours
    */
    if(IFFL_SaveBmMap(bitmap, filename,
        scr->ViewPort.ColorMap-
        >ColorTable,
        IFFL_COMPRESS_BYTERUN) == 0)
        printf("Error: could not write IFF picture\n");
    else
        printf("Error: could not make filename\n");
}

```

allows us to manipulate its bitmap a SuperBMP window. But, this change is not just supplying a new flag to "OpenWindowTags()". We must also create a bitmap of our own (see Example 3), and let the window use it.

Once we have our SuperBMP window, we can think about loading and saving. The code snippet for loading a picture (after a successful ASL file request) is shown in Example 3. The functions starting with "IFFL_" come from the "IFF library", which needs to be in your "LIBS:" directory. To access the functions we also need the "iff.h" header file. (In fact, we're actually using a slightly modified version of "iff.h"; that's a bit more compatible with StormC.)

The key parts of the code are the creation of a complete filename from the results of the ASL file

IFF

The Interchange File Format, designed by Electronic Arts way back in 1985. It's basically a format for structuring data such as pictures, text, sound files, or just about anything. The word "IFF" does not really describe the kind of data, but it is often taken to mean ILM data (ie, Interlaved Bitmap, or a picture) in IFF format.

request (using the DOS function "AddPart()") the extraction of colour information from the file (using "IFFL_SetColorTab()"), the loading of the screen colours (using "LoadRGB441()"), and the updating of the display once the image is loaded. This last bit is the trickiest, requiring us to use "CopySBMMap()" on the window's layer. This is only needed when you make a direct change to a SuperBMP window's bitmap (like we have here), and not when you use the normal (RestPort) drawing functions.

The save mechanism requests a file in the same way as the load did, except we've used "ASLFR_Flags1" to indicate that we'd like a save mode requested and we've suggested a suitable initial filename. The real meat, though, is the saving code (see Example 4). This must first make sure that our bitmap is synchronised with the display. The function "SyncSBMMap()" basically gets Intuition to write any buffered changes to the SuperBMP window's bitmap. Then "IFFL_SaveBmMap()" can be used to write the bitmap to disk (as an IFF

Library

As we've seen before, a library is a collection of functions. More specifically, the Amiga makes use of "shared" libraries, which are the files ending in ".library" that you find (usually) in your "LIBS:" directory. These collections of functions are "shared" because each program that uses them does not use its own copy, but shares a single global copy (and this gives a great saving on memory). In fact, multiple programs can use the same library function at the same time.



SBM; with our current screen colours as the picture's colour information

Tidying up

The way the toggling of the tool window is handled via a state variable ("openInv") is a good general concept, but it's actually a slight bit of overkill in the example. A better way to do things is to use a different approach to message handling.

Rather than get a message, act on it and then reply to it, we can instead copy the relevant pieces of a message and then reply to it straight away. The next example ("esf1.c") uses this new technique where we are now free to close the tool window in the message handing code.

The one subtlety to spot is the extra condition on the "while" loop for handling the tool window's messages. This checks that the tool window is still open, and so stops the loop after any message that causes the tool window to close.

We are going to make use of this new flexible style of message handling in a more spectacular way later, but for now we'll tackle one big, but one small stylistic problem. The latter is the fact that the requesters "forget" the directory cho-

sen by the user the previous time they were opened [ie, the last requester always starts in the current directory].

This can be cured by moving the tags which initialise aspects of the requester into the creation call (as part of "AslRequestTags()") and into "AllocAslRequest()". This change has been made in the next example, which now has a whole directory to itself (see "loadsave.c" in the sub-directory "asl2").

So, what are all those files in "asl2"? Well, as we saw in a slightly continued way before, it's a good idea to break up your program into modules. That's exactly what's happened here: the "esf1.c" is broken up into a number of modules.

The key concept is to restrict access to all those global variables, and make only certain bits of code able to change their value. For example, the "loadseq" and "saveseq" variables have now been localised to the module "loadsave.c" (the "static" keyword means that they are visible only to code in that file, but otherwise they're just like global variables).

Read access to the variables is granted by "get0000" functions, so the code that needs to use, say, the window pointers still can.

This is another point of interest in the structure of the header files (the ".h" file corresponding to each code, or ".c", file). In a time-honoured way, the prototypes are wrapped in an "#ifndef" that prevents the compiler seeing the contents twice, even if the file is included multiple times (directly or indirectly) when compiling a module.

Take you time to study the other effects that this modularisation has had. You might also notice the "Smakelite", which is used by SAS/C to compile multiple-files projects like this. If you've got both SAS/C and StormC, take care to delete the ".o" files when you swap compilers!

SuperBitMap window

A window where you supply a bitmap for the window to use. The benefit of this is you can then access the complete contents of the window as a bitmap. Care is needed to keep Intuition informed of changes you make directly to the bitmap (by using "CopySBitMap()"), and to get Intuition to update the bitmap when you want to read it (by using "SyncSBitMap()"). For technical reasons, these functions work on the layer associated with a window, rather than on the window.

whole GUI (screen and all) and the most significant changes are in "loadsave.c". The display should now change to the most appropriate settings for the picture to be loaded, in terms of resolution, depth and size.

We've almost got a paint package on our hands, so we've come a long way in only a few months! Next month we'll look at adding a bit of ARexx into the equation. See you then ■
Jason Hulme

Wheel

Piece of material (usually stains or wood) in the shape of a circle. Useful for making things move along the ground easily. ■ Worldwide patent has expired so the design is freely available.

Next Month



Myst: review and CD demo!

Just slipping through the net for this issue's deadline, word came from ClickBOOM that Myst has now finally been finished! We'll have the definitive review of the game we exclusively previewed in the December issue, along with a real treat for CD-ROM owners: an exclusive playable demo on the cover CD so you can see for yourselves whether it really is the ultimate adventure. We can't wait!

Amiga Forever

Seize the opportunity to bring the Amiga to a wider audience than ever before: by releasing the official Amiga emulator for the PC. We'll be taking a good look at it next month and asking the people who matter some pertinent questions. Evidence of Gateway selling the Amiga up the river, or a shift away from hardware dependency?



New Amiga clones explored

We'll be testing out Micronik's new Amiga clones, specifically their exciting new A1500 (not a clone of the Commodore A1500 by the way) and also highlighting the developments elsewhere as a range of third party clones hit the market.



Ami 3.0 speaks
I know what I do on the Internet is I see every web page up to 50 of those till I get new icons. This is best viewed with 'xxx' blurb or even the page must be viewed in 800x600 tricolour. None of those people will make these pages understand the concept of the web, a standard, no, it's a proprietary format for particular program.

Web pages are not supposed to offer the ability to present something as perfect, it's a simple guess, not in a standard format. I don't want to see you favouring browser, have my own. I don't want to use that standard. I have my own. It's just a goddamn web site at telling me what should run and how to look at it or run the risk of me spending less time there.

Lose the stupid get new icons. Just how many times do you think I've seen get the latest PC browser icons? I don't need to be told what to use. Amiga wise either Hell, the RCS home page even rants on about how wonderful AWeb is and how it's broken in other browsers.

Fix your HTML then. This is a disturbing trend creasing into Amiga web pages. The quicker we rip it in the bud, the better.

Surf's Up!

Another goats horn overflowing with fruit and corn (that's a cornucopia by the way) of Internet sites.

Miami 3 public beta

The Amiga's premier TCP/IP software package prepares for version 3 with a public beta containing most of the features. The beta, dubbed version 2.9x, is available from the author's home page at <http://www.nordicglobal.com>. One new feature for Miami 3 includes



the removal of the user interface to separate plug in modules.

The public beta still only comes with an MUI module but this can be completely ejected when the interface is not in use, thereby saving a small amount of memory if no other MUI applications are running. A GLayout/Gcactus version will be available in the final 3.0 release. The beta retains the 1 hour limit in unregistered form so it too can be tested for free.

Miami 3 has also grown the ability to communicate through a SOCKS based Firewall. The main use for this would be Miami connected to a PC based network to gain access to the Internet. The SOCKS support would allow most Amiga Internet applications to work transparently although our initial tests failed to get this working adequately on the beta version.

The other utilities bundled with Miami have also seen minor improvements, better modem con-



trol and individual database entries can be disabled. Miami 3.0 does require a new keyfile version which can be ordered over the Internet as an upgrade. Alternatively new users can purchase Miami 3 outright from Active Software for £23 on 01325-352260.

WebFX 1.7 released

WebFX 1.7 has been released. This is a shareware package which uses ImageFX 2.1+ to create animations, crossfades and shadow graphics for your own web graphics.

This can enhance the look of your web page a great deal, previously the Amiga was lacking in software to perform this task. WebFX uses ImageFX to process the images into frame files and it then uses WhirlGIF, the command line Unix port program to generate AnimGIFs which can be used on the web. You can find the 209K odd WebFX on the Amiga in the [comm/www/WebFX/](http://www.voidsoft.com/~tsoft/websfx.html) file path or see <http://www.interroom.it/~tsoft/websfx.html> for the home page.

RC5-56 cracked

The Amiga team in the Bovine RC5 effort made it to 7th place by the time the winning key was found.

Given that the team started much later than many teams, this was a startling fact. The Amiga team made 3rd position several times in the

daily block upload rates. Now that the 56-key has been cracked, there's reliable support for continuing with the 64-bit key cracking effort.

Unfortunately there's 256 times as much key space to explore so it's not anticipated that a key would be found for years to come. However, if you are willing to throw some spare CPU power at the problem and watch the Amiga tasmn position in the stats, check out the Amiga RCS home page at <http://www.ciatron.net/~tavaly/rccr>.

Schatztruhe PPC competition

The world's largest distributor of commercial Amiga software, Stefan Ossowski's Schatztruhe announced a new monthly competition.

In order to have a chance of winning, one must find key letters written throughout Schatztruhe's website written in orange. These will fit together somehow to spell out a common Amiga term. Also on the web site is a form for submitting the competition entries and each month someone will win a PowerPC accelerator from phase 5.

The PowerPC accelerator will be for the A1200, 2000 or 34000 depending on the winners preference. Schatztruhe's Website is at <http://www.schatztruhe.de> happy hunting! ■

Mat Bettinson



The Amiga RC5 Team effort



Surf of the Month

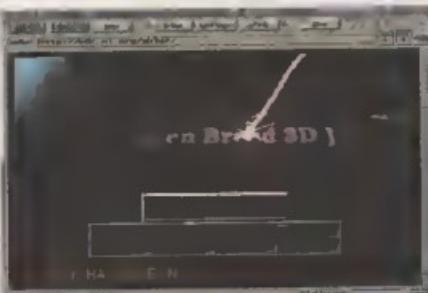
Mat Bettinson and his pet hemstar teke to tha Net to daliver another bunch of Amiga-biased Websites.

Amiga Org has been around for some time now. It has a simple mandate to CUCUG's Amiga Web Directory so that it's all things to all Amiga users. There's news, events, FAQs, links and shareware. Amiga.org is a little spartan compared to the AWD but it's on the up. Drop in and check out the events and news. There's often different stories and events updated a little quicker than on AWD.

Over at the unofficial Aleu Bread 2 home page, there's plenty of bits for Team 17's ambitious doom clone. There's news about a forthcoming version of AB3D2 that will support graphics boards and non-AGA machines. Naturally enough the new version will be based on the source code released on CU Amiga's cover CD some months back. There's custom levels, screenshots and tips also to be found on this comprehensive page. Well worth a visit for AB3D2 fans.

Every time the Amiga is mentioned in the press, chances are the article will appear on the Honourable Mention web site. Scrolling these out gives a good indication on the Amigas profile in the popular press computing or otherwise. There's also quite a few bugged facts and stories not usually found elsewhere.

Via an obscure link from this site, I found the secret piezo Gateway here to incorporate the Amiga tech



▲ A screenshot of a forthcoming AB3D2 version which supports AGA machines...

nology into a mass market application. The new affiliated company, Instinctech implements a solid waterproof build in two colour schemes for their new Amigas. It will be offered under the Standard Colour Prices and High Fashion Colour Price schemes. That's right, the Amiga Whirlpool Bath costs only \$595.99 in the basic colour scheme and includes curb-side delivery. You can scope it all off via their Bath Warehouse home page and choose your next model of Amiga and get clean at the same time.

Seriously, on the official benefice Amiga front, Amiga Technologies' home page has had something of a revamp. It now sports professional

looking graphic design.

The spinning juggling globes are certainly on theme too. The news section announces noteworthy events and the new Beta section has the latest unsupported beta versions of some Workbench components such as Setpatch and the FastFileSystem. The latter designed to break the 4Gb barrier on hard drives. Well done Amiga Technologies for improving the site to one we can be proud of.

If you spend too much time on the web end have forgotten a loved one's special occasion, you can make amends with Interflora's superb site. Here you can browse the types of flower arrangements on offer. Choose your selection, purchase and have your flowers delivered anywhere in the world via the local delivery agencies. The prices aren't cheap but if you can't drag yourself away from the web browser, this might save valuable time plucking the neighbours roses. ■

URL's

<http://www.amiga.org>

<http://www.amiga.org/ab3d2/>

<http://www.rust.net/~miga/ssh/bm.html>

<http://www.lostasteweb.com/bath/sxx6740/>

<http://www.amigaz.de>

<http://www.usafe.ae.mill/>

usual news and features on the subject can be found plus there's even details of USAF charter flight mechanisms should you decide to hire eu A10 Tank Buster to sort out the morning traffic.

If you spend too much time on the web end have forgotten a loved one's special occasion, you can make amends with Interflora's superb site. Here you can browse the types of flower arrangements on offer. Choose your selection, purchase and have your flowers delivered anywhere in the world via the local delivery agencies. The prices aren't cheap but if you can't drag yourself away from the web browser, this might save valuable time plucking the neighbours roses. ■

Mat Bettinson

▲ The all-new, all-slanty, all-dazzlin' Amiga Technologies page

▲ The Bath Warehouse home page helps you choose your next Amiga.

Wired World

This month we revisit the setting up of a web page. This time doing it the quick and easy way, as an alternative to our previously in-depth HTML tutorial. We continue to get requests to document setting up a web page, despite the lengthy HTML Wired World tutorials of the past.

Accordingly, here's the quick and easy way to get your say on the web with a different approach from that of the HTML tutorial. I still believe it's a bad idea for Amiga users to be completely isolated from HTML code but it's time we recruited a little help to take the drudgery out of it.

A brief tour around the Amiga comm/www drawer reveals a top little program called Webplug you can find it at any Amiga mirror in path comm/www/webplug125.lha, of course it's also in the magazine drawer of the cover CD WebPlug, put basically, it's a MUI-based text editor that has a bunch of functions built in for adding the common HTML codes.

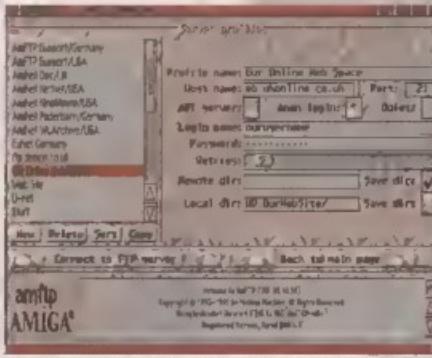
As you may know, HTML stands for Hyper Text Markup Language and its these codes that control how web pages look. This isn't as hard as programming; these are simply codes contained in <> symbols, embedded in a text file.

Insert Webplug

After installing Web plug and running it, we're faced with a web browser looking program with a row of buttons. Let's leap the leap and hit the menu option functions/headers. Another window appears all you need to do is type in a title for your first web page

Make sure the odd <BODY> is ticked too. Now press Insert.

What you see is the most basic required code for a web site. Similar to programming, you may notice that there are some of the tags



▲ Configuring AmFTP to log into the web server. From here we can upload our web pages.

which <> symbols are nested.

For example, <HTML> is at the start and end of the code. The </HTML> at the end tells us that it's time to stop the <HTML> document. Inside this, we have our whole page nested inside.

Inside the <HEAD> for header, we have the <TITLE> of the document. At the end of the title is </TITLE> and at the end of the <HEAD> is </HEAD> and so on, ending forth. It's a simple pattern and one that is important and must be obeyed.

A couple more words about HTML terminology. <TAG> is called a tag if there is something else inside the tag, it's called an attribute. For example <TAG attribute=>value>. The tag sets basic command where the attribute is an option for that tag which can be set with a value.

There can be multiple attributes and they depend on which tag is being used. Some attributes work on multiple tags.

Just the basics 'mam'

In the brief long-running HTML tutorial we covered most of the tags to detail and how to make them work. If this quick and easy guide to getting a web page up on the net, we'll only cover the basics.

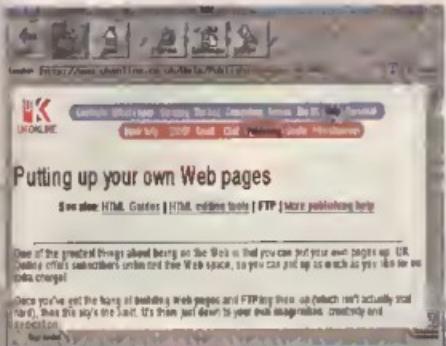
It's up to you to get back issues of C64 Amiga with the Wired World HTML tutorials or buy a book on HTML, of which there are a great deal at just about any good book store. Back to our page so far. We have a basic web page, notice there is a blank line between the <BODY> and </BODY> will always to insert the contents for our web page inbetween here. The </BODY> and </HTML> will always be in the very bottom of the page.

Insert some text here, it might be a good idea to keep some space between it and the body tags to make it clear where your contents are. We need to configure WebPlug to know about your browser. Select the menu Prefs/WebPlug, here press on the pop up gadget for Browzawlink and pick a file that matches the Browzaw you download.

These files can be found in the Browzaw link directory where you installed WebPlug. Next, select the full path to your browser executable and stick it in the Run browser box. Save your settings.

Since you've most likely moved your web browser to another screen, you can use MUI's settings to also move WebPlug to that screen. Try reading the MUI documentation if you don't know how to do it. Select Save As HTML on the 'Save as' menu and pick a place on your drive. Name your file testing.html.

To run your browser, you select Run Browzaw from the Browzaw menu. Now select Send Browzaw from the Browzaw menu again.



Putting up your own Web pages

[See also: HTML, Guides | HTML editing tools | FTP | more publishing help](#)

One of the greatest things about being on the Web is that you can put your own pages up. UK Online's customers understand the Web space, so you can get up as much as you like on one click of a mouse.

Once you've got the hang of building web pages and FTP'ing them up (which isn't actually that hard), then the sky's the limit. It's time just down to your own imagination, creativity and invention.

[Get help](#)

A UKOnline paper sheet setting up your web pages would be a good place to start.

Our first web page!

You should see your very first web page appear in your web browser.

[Get help](#)

You'll notice that if you put any returns in your text they won't have done a thing and the text will continue on a line until it hits the edge of the browser. The point of HTML is that it tells browsers how to make text look so if we want a return, we need to add some HTML to do it.

Now we're going to get to the cool stuff. Heighten some of your text and press Format button or select the Functions/Format menu option. Double click on the top line with in it. A window will appear, click on Use size and move the slider to 5. Close the window. Now drag the tag to the WebPlug window.

Now we have a tag surrounding the text you highlighted, save and send to browser. Look, we've made the font huge!

It's time to change the look of the page dramatically. Delete the <BODY> tag and leaving the cursor in the page, press the background button or select Functions/background from the menu.

In this window uncheck the add checkbox. Click on BGColor checkbox, press the pop-up and pick a colour. Do the same for the Text checkbox. Now press Insert, Save, send to browser. We've just changed the background colour and the text colour! The next two most important features of a web pages: Images. To create an image, you'll need to save your image as the GIF format. You can use something like PPaint

To create an image, you'll need to save your image as the GIF format. You can use something like PPaint

What to do with your pages

It's one thing having a web page and a couple of pictures on your hard drive but how do you get them onto the Internet. Well you'll need an account with an Internet Service Provider of course.

Last month we announced a free trial for CU Amiga readers with UK Online readers. For these people it would be a good idea to check out their documentation at <http://www.ukonline.co.uk/Help/Publishing>. If you have an account with another ISP, you'll need to see them how to upload your web site. Generally if your pages work off disk and the HTML and Images are in the same drawer, all you need to do is to rename the main page to index.html and upload all of the files to an FTP server. That means you'll need an FTP client such as AmFTP. UK Online customers will already have AmFTP as part of the Netconnect Lite package.

For UK Online, you would configure the FTP client to connect to the site www.ukonline.co.uk and set your username and password to the same as you use to log in to the Net. You should be free to select all your web files and press upload. Your web site would then appear at <http://web.ukonline.co.uk/yourusername/>

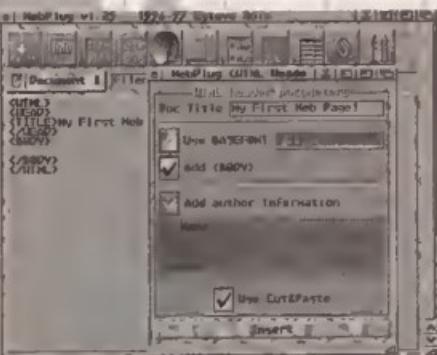
want to stop and double click on
. Force CR in the Format window. Cycle the gadget to Clear all and drag the
 tag over to the window.

No home page is complete without a link to your favourite Amiga Magazine WebPlug, a little flokey in this area so you're going to have to type it by hand.

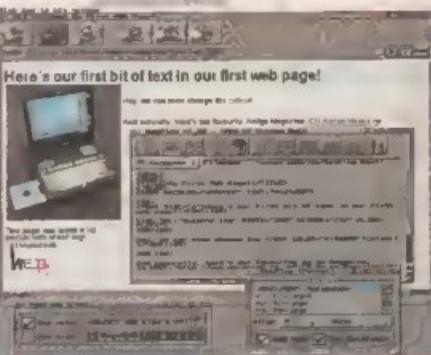
<A HREF="<http://www.cuamiga.co.uk/>">CU Amiga Magazine

The text 'CU Amiga Magazine' will be underlined and pressing enter this in your web page will take them to the page listed in the 'HREF' attribute. In this case it's the URL of UK Online of course.

Experimentation from here on is the key, happy HTMLing! Met Bettinson



▲ WebPlug makes creating web pages a breeze



▲ Opening WebPlug on our browser screen shows what the results will look like

THC-00 Resonator

■ Price: £169 ■ Supplier: Turnkey Audio 0171 379 5148

Sound Lab takes a trip into the murky world of analogue filters with a look at the Resonator.

► Decked the board of most rackmount units, the Resonator comes with bright green paint on a space-age aluminium casing.



How many things could you buy for £169 that are capable of totally revolutionising your Amiga music set-up? A cheap reverb unit maybe? Fine, but hardly revolutionary. Perhaps a budget MIDI sound module with a selection of pianos and flutes for you to play with? Nah. What you really want is a big fat filter bank!

The THC-00 Resonator is just that: a bank of big fat filters. It's an analogue sound processor which uses the kind of filters and oscillators that those classic analogue synths like the TB303 and Moogs are based on. Actually, it uses the same circuits as the Korg PS series such as the PS-3100. However, unlike a synth, on its own it won't make a sound. First you need to feed it an audio signal which you can then bend, twist, squirm and squinch as you see fit.

Most bits of music production hardware

have a very specific and definable use. A graphic equaliser takes out unwanted noise and boosts weak frequencies. A reverb unit makes instruments sound as if they're being played in real life settings. A compressor/limiter offers better control over recording levels. However, the Resonator does its thing purely for the hell of it. There's no sensible reasoning behind what it does, and frankly there's nothing sensible about what it does at all. On those grounds it's scored a point in my book already.

How it works

For anyone who's not strictly au fait with analogue synth technology fathoming the mysteries of the front panel controls could be a bit of a challenge, although the 'manual' has a fairly good but very brief crack at explaining it all (it's just a piece of A4 card folded to make two pages). Now it's my turn to have a go then.

It all starts with your audio source. That could be anything you like, such as one of your Amiga audio outputs, a synth, an elec-

tric guitar, a drum machine, a CD player or whatever. The only limitation is that the input is mono, connecting through one of two 1/4 inch jack sockets (one on the front and one on the back – take your pick). With the Bypass switch in the On position or the Resonance knob turned right down, you'll then get the pure unadulterated sound source coming from the stereo audio outputs.

The first stage in processing your sound is to switch Bypass to Off and turn up the Resonance knob. In effect this controls the mix of the original and the processed sound that's passed to the stereo outputs. Now you can set the amount of action that will occur in each of the three Bandpass Filter Frequencies. This three-filter arrangement is what gives the Resonator its stereo output capability. The first and third filters can be panned in various degrees to either side of the stereo image, while filter two is locked in the centre. When combined with the other controls you can get some wild stereo effects. The Stereo Pan knob (number two on the emulsion below) has the effect of widening or closing up the stereo image. In fact you can get the outputs from filters one and three to switch sides completely from

A guided tour

The aluminium case of the Resonator is a standard 1U rack-mount affair, which means it's got a front panel measuring 48 x 5cm. It's unusually shallow for a rack-mount box at just 8.5cm deep. There are five connections on the back panel (see the picture at the top of the opposite page):

- Audio input (mono 1/4 inch jack socket)
 - Audio output (dual mono 1/4 inch jack sockets)
 - Power input (12V AC external power supply)
 - Modulation Input (mono 1/4 inch jack socket)
- And here's a tour of the front

- panel:
- 1. Audio input
- 2. Stereo pan
- 3. Resonance level
- 4. Volume
- 5. Bypass switch
- 6. Bandpass 1
- 7. Bandpass 2
- 8. Bandpass 3

- 9. LED indicator LED
- 10. LED modulation rate
- 11. LED modulation depth
- 12. Mod selector
- 13. Envelope modulation depth
- 14. Envelope modulation decay
- 15. Polarity switch
- 16. Bassmod modulation depth
- 17. Mutedmod depth





A The back panel features alternative inputs for modulation and audio, along with the stereo output and a socket for the external power supply.

Left to right by cranking the Stereo knob from one extreme to the other. So not only does the Resonator totally mess up your sound, it gives space and movement to the flattest of mono sources.

Next up is the LFO (low frequency oscillator) modulation section. This creates a kind of automatic slide in the filter frequencies from high to low. You can set the amount of frequency modulation and also the rate at which it swings from high to low. There's a pulsing red LED that gives you a visual indication of the speed of the LFO. If you want the filters to open and close without you turning the knobs you can set this to any rate you like. You can turn either of these knobs fully down to bypass this section.

Here's the science bit

Things get a bit more confusing when you reach the three-way Mod switch. This selects different combinations of LFO types and Bandpass filters. It's complicated if you read what it's actually doing but at the end of the day you can just flick the switch and hear how it affects the sound without having to understand what's really happening behind the scenes.

Moving along we come to the Envelope Modulation section. This allows you to link the opening or closing of the filters to the volume of the sound you're processing. For example, you can set things up so that the filter is opened and closed by loud and quiet bits of your source sound. You can also select whether the filters will open to allow higher frequencies through or close to hit the following parts of the sound. This means for example you can get the filters working in time with a rhythm loop. Finally there's an input for an external signal to control the Envelope Modulation.

The fat bottom line

The bottom line is that this is a great bit of kit to have at your disposal. It could easily be integrated with the simplest of systems. Thanks to its Bypass mode you could keep it menacingly attached to one of your Amiga audio outputs. In bigger systems it will work

As featured on...

For those still unsure of the kind of sounds you can get from the Resonator, here's my top five list of tracks that make good use of an analogue filter bank (though not the Resonator specifically). They're all top tunes by the way, so don't be afraid to ask your friendly neighbourhood record shop assistant to dig them out for you.

Artist	Title	Label
1. DBX	Losing Control	Peecefrog
2. Wink	Don't Laugh	XL
3. Dark Comedy	The Bar	Elyspe
4. Dave Clarke	Southside	Deconstruction
5. Sonic Patrol	Bang Loose	M-Traxx

well used with an insert point on a mixer or via the external effects loop.

Because it's got such a dial-inactive sound you'll have to be careful about using it, but then that's the case with most new musical toys anyway. Subtly different (ie. more limited) alternatives to the Resonator are currently being used on loads of dance tracks but in less than innovative ways.

The Resonator has the advantage of not only being the cheapest analogue filter bank on the market but also one of the most versatile. The Envelope Modulation section gives rise to all kinds of possibilities. With the polarity switch one way, you can instantly transform breakdowns and rhythm loops into something that sounds like funky DJ music. Flick it the other way and your vocals turn to liquid, dripping from the back of the box like little acid rifts.

If you're into any kind of loop-based music you'll find this a fascinating tool. Simply take a loop, preferably with some good base, mid-range and treble action in it, put it through this, set the filter to slide up and down very slowly then sit back and enjoy the ride. The Resonator will have a good go at sending you into a funky trance as it continually morphs the loop into new and interesting shapes, bringing out parts elements of the sound you never would have realised were there in the first place. Top stuff for techno, house and drum & bass producers in particular.

Do you really need one though?

The answer to that question depends on where you want to go with your music. If you just use it like many would suggest, to make a digital synth sound more analog, then no, it's not really worth it. However, if you want to transcend the capabilities of your Amiga sampler and any other equipment you might have, then it certainly is. Mutate your breakbeats, dismember your vocals, reduce entire tracks to bass-bin flapping monster heartbeats...

Worth every penny

It's not often we review hardware in CU Amiga (that's not actually Amiga-specific). When we do, it's because we've come across something we feel is a bit special. That's exactly the case with the Resonator.

I bought this one from Turnkey Audio in London (they're the official UK distributor) for £169 and I've got no complaints. Pick one up and you might not think you've got yourself a worth - it's lighter than anything else you're likely to have in your audio set up, but as far as I'm concerned it certainly delivers when it comes to churning out wild and fat sounds. I didn't actually intend to review it in the msg, but I was so pleased with it I couldn't keep the secret to myself. If you're into more 'conventional' music production, I couldn't say that you'd definitely find a use for this. It won't make your music sound more 'weird' that's for sure!

However, I'd recommend anyone who wants a new secret weapon in their sonic armoury gets their hands on one as soon as possible. ■

Tony Morgan

THC-00 RESONATOR

Developer: Freeform Audio Technologies

System Requirements:

Any sound source to feed through a sound card on your Amiga.

Ease of use:

80%

Performance:

82%

Value for money:

88%

Overall:

A superb addition to any tech-music maker's studio

92%

Desktop Publishing

Professional Page 4.1



PART **9** **Here to help you get your images from DrawStudio Lite into ProPage is Larry Hickmott with some extremely useful tips and hints.**

Since CU Amiga gave you the fabulous DrawStudio Lite, I have received quite a few phone calls about getting images from DrawStudio Lite into Professional Page, another package given away on the cover of your favourite magazine. So in this

workshop, I want to discuss this in depth by giving you a number of examples and how they should be treated when taking them from DrawStudio Lite and into ProPage.

Let's start by looking at the compatibility question. We all know that the Amiga standard bitmap format

is IFF-ILBM. This can be used in any number of Amiga applications and I can't remember the last time an IFF-ILBM bitmap looked screwed up after being loaded into an Amiga application. The upshot of this is that in my opinion, the IFF-ILBM is by far the best type of graphic to use when you want a reliable format supported by the majority of Amiga applications.

Compare this with the compatibility of structured formats. In my time, I have seen DR2D-IFF files (the Amiga structured standard format) look fine in one application like ProVector 3 and then appear completely screwed up in another program.

such as ProVector 2.

The reason I used ProVector as the example was because here we have the same application but different versions and still you can have problems with structured graphics. To be fair to ProVector, I have seen the same mixed results when using the same image in around four or five Amiga applications that support DR2D-IFF. Which is one significant reason why I don't recommend using structured format files.

I don't know about you, but I want consistency when moving files from application to application and the only graphics format that gives me this is the IFF-ILBM. This is of

Exporting from DrawStudio Lite

Example 1: Here we have a title to be used as a masthead for a magazine from cover being created in ProPage. This masthead could never have been done in ProDraw, Art Expression, ProVector or ProPage itself. At the moment, it's a structured object within DrawStudio Lite but I want to be able to import it into ProPage at a resolution suitable for printing on an Epson Stylus at 1440dpi.

Your first step is to make sure that only the objects you want to export are selected. Then choose from the Project menu the item, Export/Bitmap (in version 2 there is also an Export/PostScript

option). As soon as you do this, DrawStudio will pop-up a requester asking you which objects you want to export. Click on Selected Objects.

The next request is very important because from here, you control the output resolution, the colour depth and also whether you want anti-aliasing applied. This latter option is normally ignored except when you export as "8-bit Grey". In DrawStudio 2, you can also have anti-aliasing on with 24-bit colour export.

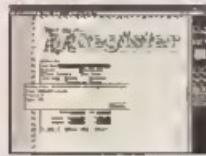
For normal uses, such as when printing A4 size covers with a desktop type printer, I'd choose a width of 1200 pixels. There is no science in that choice, I just know that I don't get any pixelisation or jaggies when I spread the image across the width of an A4 page in ProPage. A little tip here is to

make sure that you hit the return key after typing the figures into the Width box. Providing you've "Retain Aspect Ratio" ticked, the height is entered for you.

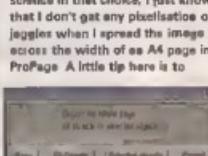
When you have set the attributes, click OK and for a short while, DrawStudio Lite will stop and do the conversion after which, you will get a second requester, where you can choose the exported bitmap format and the file name. You may also notice that this requester can be closed, so if it's too small for you, stretch it until it is as big as you need. At the end of the Filename text gadget is a button which can

be used for choosing the volume and drawer where you want the new file placed. As you can see, DrawStudio Lite supports many different bitmap formats and the one chosen depends on what application the image is being imported into.

In our case, I'm using ProPage, so I've used IFF-ILBM. If you had PageStream 3 with the JPEG import module, you could choose JPEG. If you were creating titles for a WEB page, again, choose JPEG or GIF. To finish, click Export and save the image to disk. You can now run ProPage, draw a box across the top of a page and import to that frame, the graphic from DrawStudio Lite.



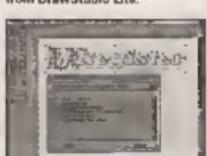
▲ Here is an example of a masthead I created in DrawStudio for use on a magazine cover. By keeping this set the export resolution, you can ensure the printed quality is of the highest standard.



▲ When you have objects selected on the page and you choose Export/Bitmap, click on Selected Object unless you want to export more than just the image.



▲ A key feature in DrawStudio is its ability to let you choose the resolution and colour depth of exported images. It's important when working with applications like ProPage because you can control the quality of the printed image by changing the appropriate attributes.



▲ Being able to choose the bitmap format for export is handy. If you do WEB graphics you can use GIF; if you create stuff for ProPage you can select IFF-ILBM.

Scaling Images in Professional Page

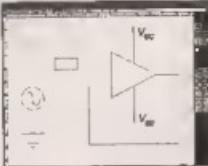
In general, there are two types of images you will create in DrawStudio Lite.

One is an image with lots of colours like a photograph, commonly called a continuous tone image. The second is a line art picture using a single colour such as black. Some examples of this are line illustrations, plain text and diagrams.

These are the types of images you can create in older drawing programs like ProDraw but you can also do it in DrawStudio Lite even though there is no provision to export as a structured object. The reason people prefer a structured format for such pictures is because bitmap line art can print horribly if a few basic rules are not adhered to.

I bet we all remember a lot of that really awful black and white clip art, which on screen, wasn't much bigger than a postage stamp and when printed, was all blocky and ugly. There is a fairly important lesson which can be learned from such stuff. Size is everything!

Let's say you want to create a small diagram and you want to print it one inch wide. Because DrawStudio Lite is page based and objects created in it are

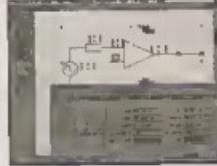


A. Diagrams from DrawStudio Lite can easily be created and exported for use in Professional Page. Just make sure you create the diagram at the actual size you want it printed on paper or, and then choose the maximum resolution of your printer when exporting from DrawStudio Lite.

structured, you can create it one inch wide. The crunch comes when you want to export it.

If you export it at the default resolution of 75 dpi and size it to one inch in Professional Page, when you print it at 300 dpi or worse still, at 1440 dpi, you will get a blocky image. This is because the pixels making up the bitmap are 1/75th of an inch and the dots on the printer are much finer at 300th of an inch. This is a more simplified example.

The solution is to export at a resolution equal to that of your printer. Let's say you have an

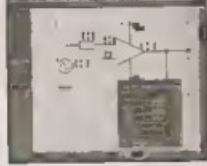


B. If a diagram has been created at the wrong size, it can be scaled in DrawStudio Lite to a size you require using the Object Specs menu item. Make sure to group the objects first.

Epson Stylus and want to print at 720 dpi. The resolution you should choose when you export the image would be 720 dpi or thereabouts. Also don't forget to set the quality to 1-bit for line art.

Here is all that again step by step. Create your image on the page at the same size you want it to appear when printed because this makes the mathematics of choosing the export resolution easier. Then select all the objects and choose Project/Export/Bitmap.

Click on Selected Objects in the next square and then in the X Resolution gadget, type 720 and press return. Providing you have the "Retain Aspect Ratio"



C. When exporting a line drawing with just a single colour (such as black), choose 1-bit. If the image has more colours, choose 8-bit colour or 8-bit grey.

checkbox ticked, the Y Resolution gadget will be filled in for you also at 720 dpi.

Continue the export to disk and then load the image into Professional Page. Make sure the box for the image is one inch big and then print. You will see no jaggies and the file size is just 7 kilobytes.

There isn't any reason not to use this method. There will however be those who will say, "but what do I do if I want to scale it bigger?" Easy, you export it again at a higher resolution or do that in the first place because it's always better to make it too big and scale down than too small and scale up.

course supported by DrawStudio Lite. Anyone bemoaning the lack of support for structured formats in DrawStudio Lite would do well to remember what I've discussed above before getting too worked up about it.

That isn't to say DrawStudio Lite

doesn't support structured formats because it will Open DR2D-IFF and DrawStudio 2 will support for the export of PostScript and EPS files for use in programs like Wordworth and Final Writer.

But even though DrawStudio 2 supports this, it isn't something I recommend because of the compatibility issue and also the lack of creative freedom when using such formats. What I mean by this is that if you're using a bitmap format, you can quite happily make use of all of DrawStudio Lite's wonderful features without having to worry about whether or not these are sup-

ported by the chosen graphic format. The only proviso I put on this is that DrawStudio Lite lacks 24-bit support (supported by DrawStudio 2) and that 24-bit capability is required for transparency support. If you use 8-bit greyscale however, you can use transparency as much as you like.

There are a few other things about structured formats I should also point out. Those of you who have seen DR2D-IFF files or even CGMs will know how simplistic the drawings are. No room for the use of transparency and bitmap files with such formats and these are further reasons I don't recommend the use of such file formats except possibly when you want to bring an image into DrawStudio to be edited.

In that case you can Open DR2D-



D. Drawings such as this DR2D-IFF was from the people at Artworks, who have loaded into DrawStudio Lite and then various parts of the drawing changed by applying bitmap files. This is just one reason why DrawStudio Lite is significantly better than older drawing programs which only allow simplistic coloring.

IFF files and then break them up into bits and use all the great functions in DrawStudio to change the look of the image to suit your needs before exporting the image as an IFF-ILBM or other bitmap format.

So don't let about not being able to use structured formats when exporting images from DrawStudio Lite for use in Professional Page or any other application for that matter. Bitmaps will print every bit is good providing you carefully choose the resolution of the image when exporting it from DrawStudio Lite. You will also have the advantage of being able to use many of the really creative functions in DrawStudio Lite without being compromised by the format of the file chosen when exporting the image.

Larry Nickmott

Upgrade Information

Upgrades from DrawStudio Lite and printed manuals for Professional Page are currently still available. Ring LH Publishing on 01908 379 230 for more details.

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OGA

Logos

Mysteries and meanings...



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Practical printing



I'm upgrading my system following a static period of about 4 years, having recently bought the accelerator/RAM/CD Could you please answer the following questions

1) With a maximum budget of about £200, would you say that the Epson Stylus still rules the roost as printers go? If not, which printer do you recommend? I'm looking for a clean, crisp output with word-processors such as Final Writer and Wordworth and decent quality graphic dumps (I do a lot of image processing using Vid Amiga RT to get my basic images and then use Vid Image FX, PPaint and DPaint 4 AGA to process and manipulate them).

2) Would Workbench 3's printer-drivers be adequate to drive the printer or should I buy a dedicated print-program such as Turbo Print? I've heard that Gateway 2000 have struck a deal with Epson to supply Workbench drivers with future printers, am I better off waiting for these to arrive before I purchase a printer? When is this likely to be?

3) Would adding a SCSI interface to my accelerator allow me to add a ZIP-drive (I don't want to have to keep disconnecting the CD-drive to use it)? My four year old hard drive is getting quite full now but I'd rather not bin it and replace it with another, even though the price I paid you can now get over £1 Gb. Hope you can help

John Orrell, Blackpool

1. Yes, basically. The HP deskjets are nice, solid desktop printers and have a slight edge on black and white, but for colour work the Epson Stylus range are as good as they come. Hunt out the Epson Stylus 600, it may be a gnat's over your budget, but it is worth it. The 400 is a very able printer for enough under your budget to

afford Turbotprint or Studiolprint too, but the Hewlett Packard 690c is a very tempting alternative to this lower resolution model.

2. No, even when the new drivers come out they are unlikely to be as good as such a specialised piece of software. The Workbench drivers tend to be acceptable for black and white, but the colour balance, dithering and so on that make for a really good colour output will only get out of a professional package.

3. You don't make it clear, but if you are using a squirrel interface than you have a SCSI connection. Up to seven devices can be connected to a Squirrel. Check on the back of your CD player and you should see an output SCSI socket. The Zip can connect to this. You will have to remember to set the SCSI ID of the ZIP differently to that of the CD-ROM, and you will have to remember to set the ZIP as the terminated device, not the CD-ROM drive. You should find a full explanation in the Squirrel manual. Otherwise, yes a SCSI connector on your accelerator will do the job just fine.

Broken PCMCIA

I bought a CD-ROM drive some months ago, connected to my A1200 via the Squirrel interface. My problem is that I also had a memory board fitted with 8MB configured and the programs started to crash.

I didn't know then that you can only have 4Mb or it will clash with the PCMCIA port, so if you could answer these questions I'd be very obliged.

1) I've broken a few pins in my PCMCIA slot, can I get it repaired? 2) If not, which would you suggest, get another second-hand A1200, or an accelerator with a SCSI interface?

3) Also, which would be the

biggest hard drive that I could get hold of for around £100? (2.5 or 3.5)

Carl Hendley, N Wales.

1. They're a right pain those micro pins on PCMCIA. You would not believe the number of A1200s with broken PCMCIA ports we've got lying around. The PCMCIA port would have to be replaced, a fiddly task not impossible. Contact any of the repair houses that advertise in the mags and ask them how much they would charge, then decide for yourself. It is worth it!

2. It is just the SCSI adaptor you want the PCMCIA for then don't worry about it, go for the accelerator with SCSI. Not only will you get an Amiga that is faster and far nicer to use, but if you get a card with a really good SCSI adaptor such as the Blizzard, you'll have damn fast SCSI too.

3. The one with the most storage space I would guess. The tip is to look at adverts in mags, visit your local shop and look around. It is pointless asking us to do this for you as by the time you read the answer it would be wrong. Hard drive prices seem to drop every couple of weeks.

Prepping up

I recently bought a new 1Gb hard disk at an auction. I've fitted it in my controller but my Amiga doesn't recognise that it's there. I'm using an Amiga 600+ with the GVP SCSI controller

A friend of mine, who knows lots about Amigas, said I needed software to prep, install and partition the drive - and that there was still a place selling GVP equipment/software in Germany. Could you give me the address or tell me of some other place I could get this software?

Iain Coleman, Plymouth



▲ The Eggam Photos photo - tee of the range colour intell. bat bohr brothers Stylos 100 and 800 do a great job as a light badge.

The GVP SCSI controller was shipped with a disk containing GVP's software package for formatting, partition and prepping of drives. If you have lost your disk, any FD library should be able to supply you with a disk of hard drive prep tools.

GVP still exists, sort of, as GVP.M, who bought out much of the old GVP when they went bust. You can ring them in the states on +1 215 533-7711 or ring their UK distributor Power Computing on (01234) 851500. If you have Internet access, visit their website on www.gvp-m.com where you can download the latest version of their expert prep software.

Assign too many

I've got an Amiga 1200 with a 3.5" 2.1Gb hard drive and I have an amo come up on the DOS screen just before I get to the Workbench screen. The message is can't find WORK:/GAMES/! In front of the line. This "comments out" the line, meaning the instruction will be ignored. If you do this, it is easy to reformat the line if things go wrong by just removing the semicolon.

If you are too nervous even for this, there is a solution, but it is a bit of a sledgehammer and string fix. Try opening a shell and typing:

Craig Nixon, Sheffield.

You will be glad to know that this is a simple problem, and rather a common one too. As your machine boots up, it runs a list of commands in a file called user-startup in the "a" directory of your Workbench. When you install a program, it isn't uncommon for it to add commands to this file.

The most common one is what is called an assign, a command which tells the computer where it can find the program you have just installed. Somewhere in your user-startup, there is a command, probably an assign, calling the directory work:games/t.

It is almost certainly assigned to a program you installed and then removed. If you load a user-startup into a text editor (such as ed which comes with Workbench) you should quite easily be able to locate the appropriate line and then remove it.

If you are unsure about what you are doing then rather than deleting the file, put a semicolon in front of the line. This "comments out" the line, meaning the instruction will be ignored. If you do this, it is easy to reformat the line if things go wrong by just removing the semicolon.

If you are too nervous even for this, there is a solution, but it is a bit of a sledgehammer and string fix. Try opening a shell and typing:

mekedir work:games/t

This will create an empty directory for an assign to read to. There are circumstances in which this won't work, and you'll have to follow the solution above.

How many questions?

I do have quite a few questions that need answering. So I'd be grateful if you could please help me?

1) Where can I get an A4000 in the case design like the one that you printed on page 87 in the November issue?

2) Can I still get an original A4000 keyboard and mouse?

3) In a rival magazine I read that the A4000 came with a HD floppy drive that can format up to 1.7Gb in size?

4) If I can get said keyboard will I have; Ctrl, Amiga, Amiga repeat, plus a button on the case?

5) What exactly is AH?

6) Can I fit Kickstart 3.1?

7) Can I have 4 SIMM slots on the motherboard?

8) Can I have 8Mb of Chip RAM fitted?

9) Can Zorro III slots take Zorro II cards, PCI cards and RAM cards?

10) Can I have 2 video slots total separate from the Zorro slots?

11) Does Workbench 2 X+ recognise hard disks bigger than:

Tech Tip: Linguistics



OK, we're going light on the techy stuff this month. No, we aren't going to stop giving you the inside story on everything Amiga, we're just going to do it a lighter, fluffier, more Christmassy sort of way. Put aside your screwdrivers and lay down the soldering iron, for this month we bring you a quick guide pronunciation. So, for the benefit of all those people who call us up asking for help doing 3D renders with their old "Immer-jins" cover disks or talk about LightWave "emissions" – some of the weirdest readers and some well known Amiga professionals both – Heygey Tchrissensee

AGA – ay-gah-ay:
Age (ahgah) is a kind of stove, not a chipset.

Amilet – em-e-nat:
Not Amy-ne. Whatever anyone thinks, even Urban Müller. Same story for many other words beginning in Ami. You wouldn't talk about an Amy-gels 1200 would you?

Cache – cash:
We've often wondered what a level 2 cache was.

PCU – see-uh:
If anyone knows what a PCU is please tell us.

CU Amiga Magazine – see-you eh-mee-ge mag-ah-zin:
That's right, like how it is spelt. No, those are initials. It isn't Co Amiga. Nor is it a silent CU, we are not called Amiga Magazine. Oh, and for the sake of our northern readers, magazine is pronounced "mag-ah-zeen" not "books".

GIF – gif:
The G stands for graphics, not graphics. Hence gif, not jit. Simple, but we get this one wrong all the time.

Imagine – im-adj-in:
This is a standard English word and is pronounced exactly the same, no strings attached.

Jpeg – jay-pe:
Just think of a small bird with a wooden leg.

OS – oh-ess:
Pronounce the letters not the word. Oss is horses in Illitressa.

SCSI – scuz-see: Pronounce the word not letters... fuzzy ah.

Tschtschenko – tsch-tsheng-

co: Well... probably!

4Gb?

12) Does Workbench 2.X + recognise hard disk partitions bigger than 4Gb?

13) Why do I need a graphics card and what do they do?

14) What do I need to start music sampling/recording etc on an Amiga?

15) Can I have an internal ultra wide and fast SCSI 3 in place of the standard SCSI?

16) Can I also have an external 50 pin Centronics style SCSI?

17) Are the Commodore 15 pin 31 KHz monitor adaptors still around?

Mr C Hell, Nottingham.

You're certainly a curious sort aren't you. Is 17 questions enough? Are you sure you don't have a few more things that need clarification? OK, let's get this over with.

1. You can't. That isn't an A4000t, it's an A1200t in a Micronik tower case.

2. Yes, but you'll have to shop around a little.

3. It's shipped with an HD mechanism, but configured to work as a 800K drive. There is an alternative drive which happily formats 1.76Mb but it's unlikely you would find one shipped as standard. Blitsoft will sell you one for around £55. Call them on: 01908 261466.

4. Yes.

5. It is a program for handling Amiga music. It is what is known as a resterable system, which means that a program can send sound data to AHI instead of the hardware and then AHI can send it to whatever hardware you happen to have.

This means that a program need only be written to send sound out to AHI rather than for every possible sound card someone might want to use with it.

6. Check out the advert for Power Computing and you should see the range of OS3.1 chips/Workbench bundles they do. Of course, if you have a nice up-to-date GS3.1 A4000t you aren't going to need to upgrade.

7. You don't have much choice!

8. No, 2Mb is the absolute limit on chip RAM.

9. Zorro 3 takes Zorro 2 card but not PCI cards. No Amiga currently accepts PCI cards, but watch this space.

Zorro is not where you plug 'em cards in, that's what the

SIMM sockets are for

10. The video slot is for getting video information to a

Zorro based graphics card. You don't want it separate from a

Zorro slot.

11 and 12.

Amigas on the whole do not recognise a single partition larger than 4.3 Gb, but this problem can be solved by having multiple devices or using one of the various partition size hacks.

13. Graphics cards output images faster, more colourfully and at higher resolutions than Amigas without. You will be able to run a high resolution Workbench with thousands of colours without flicker and it will still move more smoothly and quickly than before.

14. That is rather beyond the scope of an answer in Q&A but the basic answer is that first you will need to get a sampler. 8 bit will do for casual work, but for high definition sound quality you need 16 bit. You can go for a parallel port or PCMCIA sampler on an A1200/600 but much better is to go for a sound card on a Zorro machine. You will need to invest in a decent microphone if you want to record live, and you will need plenty of hard drive space for samples. A good sample editor is a must - check out the review of HiSoft's Sound probe elsewhere in this issue, and you'll need a decent tracker such as Octetrix Sound Studio. We still have a few copies of our March issue with OSS on it, so turn to the back issues page now!

15. Yes, it's all a matter of the adaptor you use. The new phase 5 accelerator boards come with ultra wide SCSI 3. SCSI does not get much faster.

16. Yeah, if you buy the right cable. SCSI has loads of different connectors on it. Just get the cable that matches the two things you want to connect.

17. Yes, check out the ads,



there are loads of companies advertising that or identical products in this very magazine!

A1500 or A1500?

- 1) I'm thinking of buying an A1500. Does it come with Zorro slots?
- 2) If not, what busboard can I buy (maybe a Micronik one)?

3) I read in my local classifieds of an A500 upgraded to A1500. Is this possible?

4) How can I attach a busboard to my brothers A600?

5) If there isn't any commercial option, can you please, please show how to DIY one?

6) How much do you reckon Forgotten Forever will cost, and will you have a demo of it soon?

Thanks for answering my questions and please (if you've got any) can I have one of those lovely Amiga stickers?

Simon Preston, Birmingham.

◀ A1500 - the next generation. The Micronik tower configuration shown is same with an old A2000 like release from Commodore.

1. Yes, the A1500 comes with Zorro slots. However what people mean when they say A1500 is not necessarily clear, there are two different machines called the A1500.

One is a desktop machine almost entirely identical to the A2000, with Zorro 2 slots and OCS graphics, with Workbench 1.3 or 2.0 you are lucky, the other is the newly released Micronik tower machine based on the A1200. It has Zorro 3, AGA chipset and an A4000 style accelerator slot.

Make sure that you know what you are getting, these are two completely different machines.

2. The micronik busboard is the best known one. There is also one from RBM, and the soon to be released Atzo busboard.

The Atzo differs from the other two in that it is not Zorro, but cards for it will be a lot cheaper. It is expected to be a similar cost to the other two but come with a graphics card.

3. I would guess that this means an A500 in one of the very old upgrade cases to make it like the original A1500. An A500 cannot be made to work like an up to date AGA, Zorro 3 Micronik A1500.

4. The A600 does not have an accelerator slot the way the A1200 does. Someone in theory could build an A600 Zorro busboard but it would involve a lot of difficulty to attach trickery and would sell for too little to pay back development costs, so don't wait up.

5. No, sorry. A Zorro board would require custom chips to be made up, wouldn't save much money and you'd have to be able to confidently solder hundreds of tiny surface mount components and expansive CMOS 'touch-em-and-they-die' chips into a delicate multi-layer plate - through PCB. Forget it.

6. Details on Forgotten Forever are a little sketchy at the moment. The publication has not been sorted out yet as no price is fixed, but £29.99 is a pretty normal price these days. We will put a demo onto the CD as soon as there is one to put on!



All you festive bunnies get into the spirit of things by compiling a list of top-notch pressies from Santa Claus... On the other hand, John Kennedy fills his stockings by listing Amiga related D Words !?

D is for...**Datatype**

A unique Amiga concept, which separates an application from decoding data. Applications which support Datatypes can save and load information stored in any format as long as a Datatype exists.

There are Datatypes for almost all file types including GIF and JPEG graphics files.

Device

AmigaOS command which either displays the current system time and date (this will only be accurate if the Amiga has a battery-backed clock). A device can also be used to set the time from the Shell, in which case the battery-backed clock (if present) will also be changed.

Debug

The act of checking a program for errors. There is also a "secret" debug menu option available from the Workbench which provides options for clearing unused memory and starting RomHack mode, a little known debugging facility which allows the Amiga to communicate with another terminal over a serial link.

Default Tool

The name of the application which a file will launch when it is double-clicked. For example, a text file may have the name of your word processor as its Default tool.

Deletes

AmigaOS command for removing unwanted files and directories. This is a powerful command, especially when used with wildcards and pattern matching, so you should treat it with some respect.

Files which have been deleted cannot be recovered, at least with standard AmigaOS commands. You will need to resort to a program such as Amiback or Quarterdeck Tools, and even then there is no guarantee.

Depth Gadget

Most Amiga Workbench windows have little buttons in the surround-

ing frame. The button which usually appears in the very top right is the Depth Gadget; it shuffles the window so that it appears in front of other windows.

The Click-to-Front commodity is useful if you don't like the confusion sometimes incurred by the Depth Gadget.

Device

In Amiga terms, a Device is either a physical entity (such as a disk drive, port or serial port) or a piece of software pretending to be a physical entity (such as a pipe or ram disk). A device is where data is sent when you want something to happen, or where data is read from.

The software which provides the interface between the Amiga system and the device is called the "device driver".

Devs

The directory which contains the list of Device Drives used by the Amiga.

DHO:

Common name of a hard drive fitted to an Amiga. This is the name of the first partition on the drive; subsequent partitions are named "DHO1", "DHO2" and so on.

You can change the name using the DiskTools utility, but beware: some programs will still try and reference DHO. You can get around this by using the ASSIGN command, for example, "ASSIGN dho newd0".

Dl

An AmigaOS command which generates a list of the files and directories contained in the current directory. If a path is provided, then dl creates a list of files at that location.

Directory

Part of the file system, and a way of keeping similar files together for different uses apart. Although the files are all stored in one place on the disk it is possible for you to create virtual directories in which files can be placed.

For example, the C directory on

the Amiga Workbench disk contains all the most useful AmigaOS command, whereas the DEVS directory contains the device drivers.

DiskChange

An AmigaOS command used to inform the operating system that a drive now contains a new disk. This is normally not required, as the Amiga is constantly checking the floppy drives to see if anything new is inserted.

However, with older drives (for example, 5.25" drives) or some removable hard disk systems this command might be needed.

DiskCopy

An AmigaOS command, and a very useful one at that. DiskCopy makes a duplicate of an ordinary, formatted AmigaOS disk. Use it to back up your Workbench boot disks or coverdisks. It cannot be used with protected disks (such as games).

DiskDoctor

Included with earlier versions of AmigaOS, DiskDoctor could be used to try and rescue data stored on corrupted floppy disks.

Sometimes it worked, most times it didn't. One annoying habit was the way in which DiskDoctor renamed the disks it worked on as "Lazarus"; this triggered countless virus scare stories.

DiskSave

Vastly improved version of DiskDoctor, which also supports hard disks.

Display

An AmigaOS command which launches the utility used to select the current Display Mode.

Display Mode

The combination of screen resolutions (the number of pixels across and down), screen colours and refresh rates which define a particular display.

The Amiga has hugely flexible screen modes. Ideal for both games and applications. A plug-in graphic card expands the number

of Display Modes still further.

Dithering

A process for taking colours, for example, a screen mode may have only sixteen colours available, but by displaying neighbouring pixels in colours of the right proportions other colours may become visible.

Also used by black and white printers to give the impression of shades of grey.

Dork

Person who writes virus software, or complains about the price and lack of decent Amiga software whilst simultaneously copying commercial software from their mates.

Double-click

A quick mouse-clicking action performed on an icon to launch a program. A single-click selects the icon, a double-click starts it loading.

Drag

A selected icon can be dragged to a new location if the left mouse button is still held down whilst the mouse is moved.

This can be used to reposition icons, or "drag and drop" files to new locations or onto special "App Icons" which appear on the Workbench. For example, Personnel Paint creates an AppIcon on the Workbench; drop a picture file onto it, and it will be loaded and displayed automatically.

Drawer

Even though the Amiga file system does support directories, you're quite possibly more familiar with Drawers.

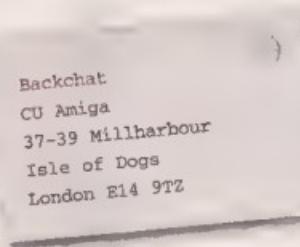
These are drawers which appear when you look at the icons stored in a disk. In fact, they are simply icon files with the same name as the directory. For example if a directory called "games" has an associated icon file called "games.info", then you can open the directory and see what is inside by double-clicking on the icon.

From the Shell, typing "dir games" would have the same effect.



Backchat

**What have you got to say for yourself? Hmm? Well come on, out with it! Put your point of view down on paper or E-mail it to:
backchat@cu-amiga.co.uk**



Barmy from Bumley

As a perfectly sane and clear-headed person, I consider myself within my rights to express my nutty feelings to you on what a truly super-duper magazine you write for us Amiga-owning folk. Can I please have a signed photograph of Kirstin Ritchie?

Oh, by the way, I have a (potentially) really cool idea for a future hardware project - as a Jean Michel Jarre wannabe I have a huge keyboard loads of crazy sound samples and a large scope for prancing around on stage. All I need now is a laser and some way to control it from my humble '030 A1200. Any ideas?

Absurdity Personified, Alpha Centauri

We shouldn't really be printing this. Hector Davidson, Somerset

"How about having two display channels? For a start you open up a new era of two player games - Battleships, racing games with dual viewpoints..."

Nice idea, but not practical really. When you took the first one off the shelf, the next would be upside down or back to front, which wouldn't do our sales any good. However, if you do get a bad disk you can return it to our normal disk returns department for a free replacement.

Double vision

While wondering about monitor options I had an idea that Gateway could incorporate into the next Amiga. How about having two display channels? For a start you open up a new era of two player games - battleships, racing games with dual viewpoints etc. Educational programs could have teacher/pupil screens. But best from my point of view would be two screen print programs

John Gray, London

It'll only encourage him. Kirstin, the CU Amiga marketing dynamo, is unfortunately unavailable for a photograph signing at the moment. As for your laser control problem, try our AIR Link project from the November issue of CU Amiga

I'm cracking up

The CD-ROMs on your covers are tops - no question. However, on collecting the last one I noticed the plastic case was badly cracked. The girl said "Yes, go and pick any of the others". The sad thing was that only one out of six cover disks was not so damaged. This has been noticed in Smiths too. Would it be practicable to pack these mags alternately - one right way up, the next upside down? That would mean a saving in depth.



A Mac青年: great idea, but how do you get the ROMs over to your Amiga?

User groups

The main point of my E-mail is Amiga user groups. What has happened to them all? During these hard times, which I might add are starting to look very promising, Amiga users need contact with each other whether by magazines, the Net or BBSes, but what about Amiga user groups?

I can remember when nearly every county in the UK had an Amiga user group. How about a page in CU Amiga for groups to advertise or for individuals to try to make contacts in there areas (free of course)?

No name supplied

We'll do just that. Anyone who has a user group, or wants to start one, should send their details to: User Groups, CU Amiga, 37-39 Millharbour, Isle of Dogs, London E14 9TZ. And when we get a few, we'll start up a regular column with contacts for user groups the world over.

Mac gaming

After reading your excellent article

Letter of the month

Return of the Grays

I hope this letter reaches you before any harm has been done. I built an AIR Link from a lot of parts and had been testing it with my VCR remote control when a friend of mine saw it and asked me to get him one. My downfall came when I connected it up to my spare A1200 and had two computers operating from the same remote controller.

I wandered off to get my beans on toast for tea and I think I remember the lights in the kitchen flickering a little. I was not prepared for what confronted me on my return to the living room. Both computers were scrolling garbage up their screens. I went over to my main Amiga in order to reboot it, but as I approached, the monitor flashed blue and purple and crackled ominously.

I turned around and started towards the mains power socket. As I got closer, both computer screens started acting up. First the text slowed down and then the

on Mac gaming, I decided that I'd write in with a few comments.

This is the kind of article which all Amiga users with half decent systems want; we've all been told how ace the Amiga is at emulating the Mac and now we know what we can really expect to run in terms of software. Who wouldn't want the chance to play the likes of Duke Nukem 3D on the Amiga?

Having read the article, I'm positively itching to give Mac emulation a shot as was overjoyed to find the massive ShapeShifter software base on the ITX CD.

I still need to get my hands on the Mac ROMs though - could you tell us of a supplier who is willing to supply modern versions of both 500k and 1Mb ROMs in an Amiga-friendly format (isn't a Mac disk?) How much should I be looking to pay? Also you mention that the Mac has an Amiga equivalent, where is this?

Ideally, you'd maybe then go on to run a feature on the nubilities of actually setting up / using / getting the most out of ShapeShifter (depending on how easy or otherwise it actually is), possibly even incorporating details of games suppliers at a good price and PD software on the cover CD.

A ShapeShifter feature would be at least as useful as the lower conversion series which you ran, although this (being software-on-

medium) started increasing to levels a cathode ray tube just can't handle. I backed off, I swear they were talking to each other.

I left in a hurry to find reinforcements. All my dad would say is he's been expecting something like this for ages, and set off for the cellar to switch us off at the main fusebox. For some reason the Isolation switch was on. The elec. timer was clocking up power at a rate we'll never be able to pay off even now the VAT's gone down, a bit [it goes on for ages but we'll spare you the rest - Ed].

John Gray, London

Not you again! One thing's for sure, you've got an active imagination! As for that bit about your neighbourhood having a power-cut at the same time (which we cut) has nothing to do with AIR Link, we can assure you. Try eating less cheese at bedtime, and avoid *The X-Files* for a while.

tated) would also be useful to people who don't like taking their machine apart. I realise that ShapeShifter comes with AmigaGuide documentation, but a bit of extra information written from a user's perspective or an "idiot's guide" can't hurt (a couple of pages an issue for a couple of months). Besides, I find that printed

"I left in a hurry to find re-enforcements. All my dad would say is he's been expecting something like this for ages..."

Instructions are far more useful than any on-screen documentation (especially having no printer).

Anyway, I'm hoping that - true to form - you'll try to help me here. I'm more than willing to shell out for ROMs, maybe a second hard drive and possibly Fusion - if it's better than ShapeShifter - just to play Mac games, and I doubt that I'm the only one.

Gavin Gunn, via E-mail.

Both ShapeShifter and Fusion include a program you can run on a real Mac which will save the ROM off to file. Modern Macs can of

course read PC disks natively so you can put in a PC disk (or format a disk as PC) and copy it over.

Now some Mac ROMs are a full megabyte in length, meaning that if you've got a stock Amiga with out a high-density drive you'll have to either compress the 1Mb ROM as something you can then uncompress on the Amiga (LHA, ZIP, etc.) or use a modem or null modem to shuttle it across.

Of course, you should only do this if you own a Mac or have otherwise legitimately paid for the Mac ROM in some way.

As for the Mac's equivalent of Aminet, it's called Info-Mac and is a very poor attempt at a definitive shareware software archive. You can access it with a browser at: <http://wwwarchive.wustl.edu/systems/mac/info-mac>

Take a look there and you'll soon realise what an amazing resource we have in the form of Aminet, in case you'd forgotten.

Overseas offers

As an occasional reader of *PC Amiga* in the States I was thrilled to find the latest demo version of Turbo Print 5 on your cover CD.

After using the program I am impressed enough to purchase it.

The problem that arises is since I am in the US, how do I go about doing the upgrade offer? Should I send the voucher to the UK and hope the shipping isn't too expensive (or the wait too long)?

Will the added postage would make it cheaper and easier to upgrade to the full version here and just pay full price? Or perhaps you know of someone honouring this offer over here in the US?

I'm sure you have addressed this in one of the latest issues of your magazine but I have not been able to locate an issue after the August '87 one to find out.

Any help would be welcome!

Johnny Mann, via E-mail

Unless it's specifically stated otherwise, all of our offers are available to all of the readers worldwide.

We don't have a US agent to handle the Turbo Print upgrades, so you should respond to the UK address. There will be an inevitable delay due to postage but these days International mail is a hell of a lot quicker than it used to be years ago.

Mora misinformation

I will come straight to the point. I want to do non-linear video editing. Looking round I find that PC systems using the Miro DC 20/20 or a host of other capture cards are plentiful, they usually come with Adobe premiere or the like and can also have 3D software for animations etc. How can the Amiga compete?

Yes I realise that I will need a tower system A4000, but I have been told by an Amiga expert not to bother



Continued overleaf >>>

er with the Amigas as there are no capture cards available. Can you help? If you can I go PC.

PS I already have an A1200, accelerator, 10MB RAM, 33MHz CPU, CD-ROM and a 540Mb hard drive.

Eddie, Milton Keynes

You've been sold duff information, as is all too common. The Amiga is still used extensively in the USA for this purpose. There are two main video capture cards you should look at: VLab Motion and DPS Pro. Both of them are designed for non-linear video editing. VLab is cheaper and uses an kind of JPEG/MPEG system while the DPS Pro card offers higher quality. Call White Knight on 01920 822 321.

Norwegian Amigans

I have noticed that a lot of my fellow Norwegian Amigans don't know where to get software or hardware.

I have also noticed that you keep giving them Appleuser's phone number. Appleuser is currently cutting down their Amiga support, but there is another company that is completely Amiga-specific: it's called Sezam Software, and their phone number is 55 10 00 70. You can also find them on the internet, at <http://www.sezam.no>.

Other companies that might have something of interest in stock are: Data Ressurs 65 63 08 27 Amico 52 82 09 05 Datkompaniet 73 54 03 75

Oh by the way, even if Appleuse seems to be deserting us, keep calling them about Amiga stuff. Perhaps we can make them change their minds. And to you wonderful people at CU Amiga, thanks for the best meg in the world.

Kay Are Ulvestad, Norway

TFX for PowerPC?

Do you think it would be possible to include some hack on your CD to allow TFX to run at fast speed on a PowerPC Amiga?

John Heydon, via email

It might be possible, but in practice it would be much more than just a hack. It would really be a complete re-write. For a start, half the TFX code is written in C, but the more time-critical routines are in optimised assembly. That would mean going back and

rewriting it all in C in order for it to be ported to PowerPC code.

There are other concerns too, not specifically regarding PowerPC conversion, but tricks such as using the copper to control the display (rather than chunky pixels) makes adding graphics card support quite a task. A PowerPC version of TFX that was still limited by the AGA chipset would fall far short of its potential. We are looking into this though, so keep reading CU Amiga for more details.

Where's WOAT?

After the World of Amiga show in May you said there was talk of another Amiga show before Christmas. Since then I've heard nothing, despite keeping a keen eye on your mag. Have I missed it, or did it just not happen?

Jamie Stevens, Croydon

It just hasn't happened for one

"That purchase opened me up for another side of life, no longer did I garden or even oag the wife"

reason or another. After the Amiga's good showing at Cologne in November (see News) it would seem likely that a World of Amiga or similar show will be scheduled for Spring or early Summer '98.

Poetry Corner

I don't know whether you welcome non-technical contributions, but I have penned the attached just in case. I am a retired "non-technical" computer devotee with an interest in art programs, card games etc.

Please feel free to use it as you wish for the entertainment of the readers, or consign it to the nearest trashcan if you deem that necessary.

Computeritis - See Raigg117

I bought my first computer when I retired from active life. Aghast boredom and stagnation it would be a perfect foil to make some video titles and even write a letter.

It seemed a perfect panacea — I could think of nothing better. I saw an advertisement in my local grocery store,

Modem cards for massage parlours on a board beside the door. It said, "I have for sale a Spectrum grey plus two."

Just part with five and twenty pounds and it belongs to you!

That purchase opened up for me another side of life.

No longer did I garden, or even nag the wife.

Every waking moment saw me aight with joy.

As I strove to understand the whims of my little boy

Soon I mastered Clive's machine and yearned for something more. So once again I visited the local grocery store.

To view the cards upon the wall was my mission clear.

Lo and behold! Upon a card the word "Amiga" did appear.

An Amiga 500 with many games on disk.

At a hundred quid it was really worth the risk.

For with it came a printer and an extra memory board.

And an external floppy added to the hoard.

With the new found purchase I really went to town.

Playing games like "Armageddon" and others of renown.

But alas word processing brought a pang of fear.

The dreaded "Leak of memory" sign on screen it did appear.

An A1200 came my way, again at a bargain price.

Just like new it was, and really very nice.

With dedicated monitor and sound stereo.

Now I've added "SAYMORE", so it can say "Hello".

This wonder tool at last satisfied my need.

Until I succumbed again to the lust for speed.

By adding an internal storage disk type hard.

And stuffing in the trapdoor slot = four meg memory card.

Have I conquered my addiction, will this all now do.

Still I have some other plans, for as I write to you.

A CD-ROM and Squirm are fitted now of course.

And a Blizzard board is coming, courtesy Parcel Force!

Sens Quigg, Limerick, N. Ireland

What a pleasure at little ends All you need to do now is dig out your copy of SoundStudio, plug in your sampler and put it all to music.

To the Point...

Deal Amiga Club

Could you mention our club? The Deal Amiga Club meets on Friday night 7pm till 11pm. It's at St John Ambulance Hall Mill Hill Deal Kent

Deal Amiga Club, via email

Consider it mentioned.

Quick questions

Could you please tell me what Zorro slots are and what is the difference between a 68060 and a 68030 both running at 50MHz?

Paul Greatorex, Bridlington

Zorro slots are expansion slots found on 'big box' desktop and tower Amigas. You could answer the second question yourself if you tried. The 600 is much faster — that's the difference end you don't need to know why more. Take a night school class in semiconductors if you really want to know more, or just keep reading CU Amiga.

You spill my pint?

As the central hub of Amiga knowledge, I am turning to you to settle an argument that I keep having with the landlord of my local pub. It's about an old game: R-Type.

He says the Amiga version was released under the name Denaris, by mistake and it was then re-released under the proper R-Type name. I say he's taking rubbish and there never was a game called Denaris. There's a free pint in it for me if you say I'm right.

Ian Morgan, Tedworth

It looks like you both owe each other a pint, as you're both wrong. What happened was that a super-hot German team created Denaris, but it was so similar to R-Type that US Gold (who had just bought the R-Type licence) stopped its release.

However, the Denaris team were then recruited to handle the official Amiga R-Type conversion and did a pretty blinding job of it too. So everyone was happy in the end.



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Points of View

They say "tis the season to be jolly" and all that, but here at CU Amiga we still take time-out from the festivities to deliver you some serious rhetoric... Beh humbug!



Required: one reality check, good condition



Every day we get letters sent to us from enthusiastic readers who have all manner of ideas, plots and schemes to get the Amiga back on track. The trouble is, many of them are not grounded in reality. Here at CU Amiga we're privileged to be able to survey the Amiga scene from a very central

viewpoint. We get to hear everyone's side of the story, from the many and varied readers and Amiga users, the software and hardware developers, and those who sell and distribute the products, not to mention Amiga International and Amiga Inc themselves. Allow me then, to administer a few reality checks.

1. This is 1997, not 1987

- Personal computers are no longer the preserve of technically-minded enthusiasts.

- The world is now of the opinion that a personal computer is a Win16 PC, end of story.

Based on this, a mass market personal computer must be able to run Win16 applications if it is to succeed.

2. An alternative platform must target niche markets

- There are plenty of niche markets to tap into: video, audio, rendering, networking, publishing and more.

- The resurgence of network-based

"The resurgence of network-based computing makes it much more practical to integrate specialist platforms into larger systems".

computing makes it much more practical to integrate specialist platforms into larger systems, reducing the requirement for Win16 compatibility.

3. See the bigger picture

- You and your mate do not necessarily equal or mirror the global Amiga scene.

- Current Amigas are used in a wide variety of diverse applications by a similarly wide variety of users, from A500 playing Champ Manager, TV studio in the USA, local club secretary making newsletters, cash-strapped musicians, independent graphic design company, internet fanatic, game/application/demo programmers, all round computer enthusiasts... the list goes on for ever.

The point of this is not to come across in a "we know best" kind of tone. It's to settle a few misconceptions that seem to crop up time and time again. As I think Petro once said, the biggest asset the Amiga has is its users. Such a motivated and loyal band have been and could prove to be a very powerful force in determining the Amiga's future. Not two people are ever going to have exactly the same vision and ideas, but at least with some informed knowledge of the facts we can start to make more productive moves towards getting our favourite machine back on top.

■ **Jay Hargan** is Editor of CU Amiga.

The importance of having Petro

I had to smile while reading Beckhoff in the October issue. In it, a reader wants to know exactly how to pronounce "Petro Tyschitschenko" because it's hardly right to just call him "Petro". But you know what? It is OK to just call him Petro.

Just in case you've missed the last three and a half years of Amiga intrigue, Petro went from head of logistics for Commodore to President of Amiga Technologies for Eocom, and is now President of Amiga International for Gateway a firm charged with global sales and marketing of Amigas.

In that time he's taken a lot of criticism from users and former employees alike and from others in the industry. But it's still OK to

just call him Petro.

Petro represents something Amiga users have wanted for so long and now that they finally have it, they're having a hard time appreciating it. Sure, it's important that Petro can go to India and open up new markets for the Amiga (it's apparently among his top countries in terms of sales these days).

But particularly since Gateway came on to the scene, Petro has made an appearance at shows and user events in most of the major Amiga using countries of the world to talk up the Amiga and its future with Gateway's new Amiga Inc development firm.

Some people don't think Petro is worthy of their respect. If you hand Petro a box containing an A1200, an accelerator card, a Hypercard,

"In many ways, Petro has been one of the only consistent things about the Amiga's recent history".

and a Net software bundle all disassembled, he might not be able to put it all together in front of you and get online. In that people don't feel he's necessarily "one of us". But that's not the point of Petro.

He's supposed to be a man who can deliver inspiring speeches, shake hands and chat with the users, and go out for a beer afterwards. Which is exactly what he does, time and time again. In many ways, Petro has been one of the only consistent things about the Amiga's recent history.

With his lifetime of qualifications, my guess is that if he really hated what he was doing, he could go

elsewhere. Commodore and Eocom make pretty good resume line items. But my guess is that he enjoys what he does - selling Amigas and coming to talk about it with users from around the world.

You don't have to love the man, it's OK if you don't even like him. But like him or not, he's the official ambassador of goodwill that Amiga users have wanted for a long time. And if he wanted to be called "Mr. Tyschitschenko", he'd go get a different job.

■ **James Compton** is US Correspondent for CU Amiga.

Who needs custom chipsets?



One of the standard lines you will hear when Amiga users discuss the future of Amiga hardware is that we have to move to PCI.

With a PCI slot, the range of hardware add-ons for the Amiga would be vastly greater. Any PC card (graphics, sound, I/O etc.) could be used on the Amiga with nothing more than a bit of driver software. The standard line you hear presupposes that doing this is not what the Amiga is about.

The Amiga is all about custom chipsets, and not industry standard rubbish.

Missing the point

What is a custom chipset when it's not just a buzzword?

Simply put, it is a chipset which has been custom designed for a certain function. When you plug an Orchid Righteous 3DFX card into a PC, you are giving that PC a custom 3D graphics chipset. The advantage of giving the Amiga PCI slots is that the custom chipset is no longer part of the main motherboard and can be replaced as custom chipset technology improves.

Everyone and his donkey are making custom chipsets these days, so there's no way Gateway can do what Commodore did long ago and make a chipset that will remain state-of-the-art for half a decade. What people really mean when they talk about the Amiga and the desire for a custom chipset is that they want the Amiga to be special and the custom chipset is what makes it special.

We need to look to the future not the past, but the Amiga needs a custom graphics chipset, leave that to the boys who can do it best and go for off the shelf cards with Cybergraphix. If we want the Amiga

"What the Amiga really needs to adopt if it wants to jump to the head of the queue and grow cutting edge credentials again is full blown DSP technology".

to have a flavour of its own, how about making sure that it does those multimedia things it is so famous for as cleverly as possible.

Make sure there is video out, as a retargetable mode. Then we get serious. Let's have built in sound and video streaming, MPEG decoding built in high speed comms, audio processing, the lot, all integrated into the workings of the machine. Sounds good? Yep. Sounds expensive? Not any more.

What the Amiga really needs to adopt if it wants to jump to the head of the queue and grow cutting edge credentials again is full blown DSP technology. Something like the Philips Trimedia DSP/co-processor. This chip is specially designed for PCI buses.

Using this, a retargeted Amiga would be simple, and give the Amiga enormous multimedia power. A chip like this is custom designed to do the jobs that your CPU doesn't

like to do.

An Amiga with this or a similar chip as a standard part (hopefully on an upgradable daughter board) would be able to earn the tag of the ultimate multimedia machine.

The chipset is going to be available as a PCI card for other computers, but it is surely of having it ship in every single Amiga that would put the Amiga up there in pole position as far as the multimedia developers are concerned.

The Amiga does need some updating and it needs components bought off the shelf, but equally it should not lose out on the unique strengths that make it the Amiga.

Information on the Philips Trimedia chip can be found at <http://www.trimedia.philips.com>.

Andrew Kerr is the Staff Writer for *CU Amiga*.

"Adios... CU (later) Amigos"



When a staff member of CU Amiga leaves, we get a barrage of mail demanding to know why, where that person has gone and what will happen next. This is understandable. Working on CU Amiga is the dream for many so it's difficult to understand why someone would want to leave. Is Amiga going belly up? Is the fan-tastic World of Amiga shows.

My departure has been known on the Net ahead of you reading

this. Accordingly I've had all of the questions already. I even wrote a FAQ on the subject and put it on my web page at <http://www.matsmei.lu.net>. The gist of this is the Amiga is not going belly up, its future is looking brighter than ever! Next, CU Amiga Magazine remains profitable and viable for ourselves, our advertisers and for our tens of thousands of readers worldwide.

It will be around for a long while yet. I don't know who's replacing me yet, maybe you. So why am I going? In short, to pursue my career. After two and a half years at CU Amiga, it's time to move on and do other things. My time at CU has been brilliant for me and some fantastic things have happened during this era. The 68050 came out, so did 64-bit graphics. There were blinding games like Worms and XTR, the company was bought and sold a few times and there were the fan-tastic World of Amiga shows.

The CD-ROM revolution took off as CD-ROMs went from a tiny minority to over 50% of active

"I'm looking forward to using an Amiga at home as my hobby once again. So you'll still see my by-lines at the articles in CU Amiga but obviously not as often".

Amiga users. Comms and the Net also changed from a tiny minority to a mainstream activity much to my delight. It's been a marvelous time indeed and while our readership has increased, those who remain are increasingly switched on. You guys are much more likely to have CD-ROMs accelerators, big-box Amigas and Net connections than before.

You are also more likely to know the Amiga intricately. It's been highly challenging to cater for your needs and dream up new ways to inform and entertain as time moved on. Who would have foreseen CD-ROM coverdiscs and even a cover-mounted PCB two years ago?

I'm looking forward to using an Amiga at home as my hobby once again. So you'll still see my by-lines on the articles in CU Amiga but obviously not as often as before. I'm

afraid I can't say where I'm going due to my contract. I can say that it's an American publisher with a UK office. My heartfelt thanks to you who made this dream job possible for me. Thank you for your E-mails and letters and I hope to see many of you around on the Net for a long time to come.

It's an exciting time for the Amiga and hopefully the beginning of the great revival. Those of us that have worked with and enjoyed the Amiga will retain the last laugh.

Hopefully the CU team will let me get on my soap box occasionally too, I wouldn't miss that for the world.

Matt Bettinson, Technical Editor for CU Amiga.

AMIGA
MAGAZINE

READER SURVEY

In order to give you the best magazine possible we'd like to find out more about you. That's what this survey is for. We've kept it just about as brief as possible so you won't spend all day filling it in. All the questions here are carefully chosen to allow us to give you the best service we can. You'll be spared the usual questions about your favourite chocolate bar and how many pets you have. As an incentive we're offering a phase 5 PowerUP card for one lucky entrant picked at random from the returns.

Buyers of floppy edition:

Do you have a CD drive?
 yes no
 disk
 CD 12

Do you intend to buy soon?
 yes no

How important are the cover disks?
 not fairly essential

How many editions of CU Amiga have you bought in 1987?
 disk
 CD

How interested are you in the following types of cover disk (0= not interested, 10=very interested)?

Commercial game demos
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 Commercial applications
 Shareware utilities
 Utility collections
 Demo/media/pictures

What would persuade you to move to CD-ROM?

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Any comments to make on the cover CDEs?

All:
 In the last year have you missed issues of CU Amiga because you couldn't find it? If yes please state your location?

yes no

How much do you intend to spend on your Amiga in the next 12 months?

£0-£30 £30-£100
 £100-£300 £300+

Which of the following do you intend to buy in the next 12 months?

software applications
 hardware add-ons

new Amiga/Amiga clone

Do you intend selling/distributing your Amiga in the next 12 months?
 yes no

Your Amiga.
 Tell us about your Amiga Model

A500/A500+ A600 A1000
 A1200 A1200T A1500 A2000
 A3000/3000T A4000/4000T CD32
 CDTV

Total RAM
 1Mb 2Mb 4Mb 8Mb
 16Mb 18Mb+

Operating system/Workbench
 1.x 2.x 3.x

Additional peripherals
 3.5" drive hard drive printer
 SCSI interface modem monitor
 Zero slots graphics card

Mark three of the following utilities that interest you most.

3D graphics
 3D graphics
 Games
 DTP/Word processing
 Making music
 Internet
 Programming
 Business
 Animation

Presetations/video
 Scientific

Do you ever use your Amiga professionally?
 yes no

What three things would you most like to see in a new Amiga?

PCI Bus AGP Bus
 Upgraded Workbench
 Multichannel 16-bit audio
 Memory protection
 3D graphics as standard

Networking
 Internet tools

Fast comm port

32-bit CPU

Retargetable graphics

GZIPing

Video output

Printer/scanner support

Backward compatibility

Digital signal processor

JAVA

Other

What were the two best two things in CU Amiga in the last year?

What were the two worst things in CU Amiga in the last year?

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